✓18146 $1,000.00 AD

BIO-WEST, Inc.

1063 West 1400 North
Logan, Utah
84321-2291
Ph: 435.752.4202
Fx: 435.752.0507
www.bio-west.com

Coastal Ecology and Marine Biology

Environmental Analysis and Permitting

Geology/ Hydrogeology and Remediation

Fisheries and Aquatic Ecology

GIS Planning and Analysis

Landscape Architecture and Environmental Planning

Vegetation Resources

Watershed Sciences

Wetland Resources

Wildlife Resources

March 15, 2016

RECEIVED
MAR 31 2016
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A Q PROGRAM

Air Quality Program Office-Application Processing
Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706

Subject: ***Permit to Construct***
Trails West Manufacturing of Idaho, Inc.
Industrial Park Drive Facility (Facility 2)
950 West Industrial Park Drive
Preston, Idaho 83263
BIO-WEST Project No. 1992

Greetings:

BIO-WEST, Inc. (BIO-WEST) has been contracted by Trails West Manufacturing of Idaho, Inc. (Trails West) to complete a Permit to Construct for the Trails West trailer manufacturing facility (Facility 2) located at 950 West Industrial Park Drive in Preston, Idaho. This is a new manufacturing facility that will be used in conjunction with the Trails West trailer manufacturing facility (Facility 1) located at 65 North 800 West in Preston, Idaho. Trails West has an air quality permit in place for Facility 1, however Facility 2 is located approximately 0.75 miles away and is not located on or adjacent to Facility 1. Therefore, a new air quality permit is required for Facility 2.

Trails West would like to start production at Facility 2 as soon as possible. Trails West previously submitted an Automotive Coating Operations General Permit to Construct for Facility 2 in order to start manufacturing operations at Facility 2 as soon as possible. The Automotive Coating Operations General Permit to Construct will allow Trails West to begin painting operations at the facility on a limited basis.

Trails West is applying for a custom Permit to Construct for the painting operations at the Facility 2 in order to begin full production at Facility 2 as soon as possible. All applicable Permit to Construct application forms, including an emissions inventory, plot plan, and air quality modeling results are included as Attachment 1.

Process Description

Trails West is a manufacturer of horse, stock and snowmobile trailers. As part of the trailer manufacturing process, two paint booths are used to apply primer and paint to the trailers. In addition, caulking is performed on the trailers to seal up the panels as part of the manufacturing process.

Trailers are assembled in the fab shop, sub-assembly, and weld portions of the plant. No baghouses are present at the facility. All metal cutting is done on four plasma cutting

tables within the facility. Only two tables are used at any one time. The tables have a downdraft exhaust system that is filtered through 2,400 square feet of filter media. The filtered air is then returned into the facility.

After assembly the trailers are washed in a zero emissions wash booth using various liquid cleaners. The trailers are then primed using an epoxy primer in the prime/cure booth. Air is ventilated through the booth from an filtered intake stack on the south end of the prime/cure booth then through two particulate filters on the south corners of the booth and out an exhaust stack on the roof. The intake and exhaust stacks are cleaned once a quarter.

After the trailers have been primed they are then prepared for painting in the caulking area of the plant. Painting of the trailers is done in a down draft paint booth. Air is ventilated into the booth through three intake zones. Each intake is equipped with a filter on the roof of the plant and a filter on the ceiling of the paint booth. Air then moves through four particulate exhaust filters near the floor of the booth and out exhaust fans on the roof of the facility. Each intake zone has two exhaust fans associated with it.

After painting the trailers are cured in the cure booth. The trailers are cured using infrared heaters and a furnace. Excess heat and excess volatiles from the cure booth are vented through an exhaust fan on the roof of the facility. Trailers are then completed in the trim portion of the plant. Both the prime and the paint booths were constructed in 2016.

Equipment List

Prime Booth: The prime booth is a cross-draft booth manufactured by AFC Finishing Services (Model ECFCSD7042). The booth was manufactured on 2/1/2016. The prime booth is equipped with a natural gas heater manufactured by AFC Finishing Services (Model DFM800R) the heat input rating of the booth heater is 1.075 Million British Thermal Units Per Hour (MMBtu/hr).

Paint Booth: The prime booth is a down-draft booth manufactured by AFC Finishing Services (Model DTSDDDT7042). The booth was manufactured on 2/1/2016. The paint booth is equipped with two natural gas heaters manufactured by AFC Finishing Services (Model AMS 2000) the heat input rating for each of the booth heaters is 2.0 MMBtu/hr.

Air Quality Modeling

The air quality modeling for the PM_{10} emissions from Facility 2 was completed using the AERSCREEN modeling program. Modeling was completed using the rural option and downwash parameters. Painting in the booths is done at room temperature and the subsequent exhaust from the booths is also at room temperature. Meteorological parameters were generated using the AERMET Seasonal Tables in AERSCREEN. The meteorological parameters were generated using the cultivated land surface profile with average moisture. Terrain data was not imported into the AERSCREEN model as the area is relatively flat. Modeling information and results are included in the Permit to Construct application documents included as Attachment 1.

Background concentrations used for the air impact analysis results on form MI1were obtained from the Logan, Utah monitoring station and the upper 99th percentile of the monitored 24-hour values for 2010 through 2014 were used.

If you have any questions or comments, please call the BIO-WEST office.

Sincerely,

Dustin Lofthouse
Hydrogeologist

Attachment 1: IDEQ Permit to Construct Application

c: Jon Reeder, Trails West

Attachment 1:

IDEQ Permit to Construct Application

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Cover Sheet for Air Permit Application – Permit to Construct **Form CSPTC**

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER			
1. Company Name	Trails West Manufacturing of Idaho, Inc.		
2. Facility Name	Trails West Manufacturing Facility 2	3. Facility ID No.	Have not recieved one.
4. Brief Project Description - One sentence or less	Seeking permit to construct for two paint booths at a trailer manufacturing facility.		

PERMIT APPLICATION TYPE

5. ☒ New Source ☐ New Source at Existing Facility ☐ PTC for a Tier I Source Processed Pursuant to IDAPA 58.01.01.209.05.c
☐ Unpermitted Existing Source ☐ Facility Emissions Cap ☐ Modify Existing Source: Permit No.:____ Date Issued:____
☐ Required by Enforcement Action: Case No.:____

6. ☒ Minor PTC ☐ Major PTC

FORMS INCLUDED

Included	N/A	Forms		DEQ Verify
☒	☐	Form CSPTC – Cover Sheet		☐
☒	☐	Form GI – Facility Information		☐
☐	☒	Form EU0 – Emissions Units General		☐
☐	☒	Form EU1– Industrial Engine Information	Please specify number of EU1s attached: ____	☐
☐	☒	Form EU2– Nonmetallic Mineral Processing Plants	Please specify number of EU2s attached: ____	☐
☒	☐	Form EU3– Spray Paint Booth Information	Please specify number of EU3s attached: 2	☐
☐	☒	Form EU4– Cooling Tower Information	Please specify number of EU3s attached: ____	☐
☐	☒	Form EU5 – Boiler Information	Please specify number of EU4s attached: ____	☐
☐	☒	Form CBP– Concrete Batch Plant	Please specify number of CBPs attached: ____	☐
☐	☒	Form HMAP – Hot Mix Asphalt Plant	Please specify number of HMAPs attached: ____	☐
☐	☒	PERF – Portable Equipment Relocation Form		☐
☐	☒	Form AO – Afterburner/Oxidizer		☐
☐	☒	Form CA – Carbon Adsorber		☐
☐	☒	Form CYS – Cyclone Separator		☐
☐	☒	Form ESP – Electrostatic Precipitator		☐
☐	☒	Form BCE– Baghouses Control Equipment		☐
☐	☒	Form SCE– Scrubbers Control Equipment		☐
☐	☒	Form VSCE – Venturi Scrubber Control Equipment		☐
☐	☒	Form CAM – Compliance Assurance Monitoring		☐
☒	☐	Forms EI-– Emissions Inventory		☐
☒	☐	PP – Plot Plan		☐
☒	☐	Forms MI1 – MI4 – Modeling	(Excel workbook, all 4 worksheets)	☐
☒	☐	Form FRA – Federal Regulation Applicability		☐

Instructions for Form CSPTC

This form is the cover sheet for an air quality permit application. It provides DEQ with basic information regarding the company and the proposed permitting action. This form helps DEQ efficiently determine whether the application is administratively complete. This form also provides the applicant with a list of forms available to aid the applicant to successfully submit a complete application.

Company Name, Facility Name, and Facility ID Number

1-3. Provide the name of your company, the name of the facility (if different than company name), and the facility identification (ID) number (Facility ID No.) in the boxes provided. The facility ID number is also known as the AIRS number or AIRS/AFS number (example: 095-00077). If you already have a permit, the facility ID number is located in the upper right hand corner of the cover page. The facility ID number must be provided unless your facility has not received one, in which case you may leave this box empty. **Use these same names and ID number on all forms.** This is useful in case any pages of the application are separated.

4. Provide a brief description of this permitting project in one sentence or less. Examples might be "Install/construct a new boiler" or "Increase the allowable process throughput." **This description will be used by DEQ as a unique identifier for this permitting project, in conjunction with the name(s) and ID number referenced in 1-3.** You will need to put this description, using the exact same words, on all other forms that are part of this project application. This is useful in case any pages of the application are separated.

Permit Application Type

5. Provide the reason you are submitting the permit application by checking the appropriate box (e.g., a new facility being constructed, a new source being constructed at an existing facility, an unpermitted existing source (as-built) applying for a permit for the first time, a permitted source to be modified, or the permit application is the result of an enforcement action, in which case provide the case number). If you are modifying an existing permitted source, provide the number and issue date of the most recent permit.

   If this PTC is for a Tier I source issued pursuant to the procedures contained at IDAPA 58.01.01.209.05.c, the source or modification may operate upon submittal of a Tier I Administrative Amendment issued pursuant to IDAPA 58.01.01.381.

6. Indicate if the application is a minor permit to construct application or a major permit to construct application by checking the appropriate box (e.g., major PTC or minor PTC). If the permit to construct application is for a major new source or major modification, you must ensure that all necessary information required by IDAPA 58.01.01.202, and .204, or .205, as applicable, is provided.

Forms Included

Check the "Included" box for each form included in this permit to construct application. If there are multiples of a form for multiple units of that type, check the box and fill in the number of forms in the blank provided.

The "N/A" box should only be checked if the form is absolutely unnecessary to complete the application. Additional information may be requested.

Application Fee

All applicants for a PTC shall submit a PTC application fee of $1000.00 to DEQ <u>at the time of the original submission of the application</u> as required by IDAPA 58.01.01.224. An application fee is not required for exemption applicability determinations, typographical errors, and name or ownership changes. An application fee can be paid by check, credit card, or Electronic Funds Transfer (EFT). If you choose to pay by credit card or EFT, call DEQs Fiscal Office to complete the necessary paperwork. Paper checks must be submitted with the original application as described below.

Submit Application

When complete, enclose a check for the application fee along with the hardcopy application certified by a responsible official (as defined in IDAPA 58.01.01.006.94), and send to:

Air Quality Program Office – Application Processing
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706-1255

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline: 1-877-5PERMIT

Please see instructions on back page before filling out the form. All information is required. If information is missing, the application will not be processed.

Identification

1. Facility name: Trails West Manufacturing Facility 2

2. Existing facility identification number: Have not recieved one.

☒ **Check if new facility (not yet operating)**

3. Brief project description: Install two paint booths at a trailer manufacturing facility (new construction).

Facility Information

4. Primary facility permitting contact name: Jon Reeder/General Manager

Contact type: Responsible official

Telephone number: 208-852-2200

E-mail: jonr@trailswesttrailers.co

5. Alternate facility permitting contact name: Jay Layland/Production Manager

Alternate contact type: Facility permitting contact

Telephone number: 208-852-2200

E-mail: jayl@trailswesttrailers.com

6. Mailing address where permit will be sent (street/city/county/state/zip code): P.O. Box 67, Preston, Idaho 83263

7. Physical address of permitted facility (if different than mailing address) (street/city/county/state/zip code): 950 West Industrial Park Drive, Preston, Idaho 83263

8. Is the equipment portable? ☐ **Yes*** ☒ **No** ***If yes, complete and attach PERF; see instructions.**

9. NAICS codes: **Primary NAICS**: 336214 **Secondary NAICS**: 336212

10. Brief business description and principal product produced: Horse, stock, and snowmobile trailer manufacturing.

11. Identify any adjacent or contiguous facility this company owns and/or operates: none

12. Specify type of application ☒ **Permit to construct (PTC); application fee of $1,000 required. See instructions.**

☐ **Tier I permit** ☐ **Tier II permit** ☐ **Tier II/Permit to construct**

For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.

☐ **Co-process Tier I modification and PTC** ☐ **Incorporate PTC at the time of Tier I renewal** ☐ **Administratively amend the Tier I permit to incorporate the PTC upon applicant's request (IDAPA 58.01.01.209.05.a, b, or c)**

Certification

In accordance with IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho), I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

13. Responsible official's name: Jon Reeder **Official's title**: General Manager

Official's address: P.O. Box 67, Preston, Idaho 83263

Telephone number: 208-852-2200 **E-mail**: jonr@trailswesttrailers.com

Official's signature: Jon Reeder **Date**: 3-28-2016

☒ **14. Check here to indicate that you want to review the draft permit before final issuance.**

Instructions for Form GI

This form is used by DEQ to identify a company or facility, equipment locations, and personnel involved with the permit application. Additional information may be required.

Identification

1. Provide the facility name. If the facility is *doing business as* (dba) a facility different in name than the primary facility, provide the dba name.
2. If the facility is an existing permitted facility in Idaho, provide the facility identification number. If the facility is new and not yet operating, check the box.
3. Provide a brief project description as on Form CS, Cover Sheet. This is useful in case any pages of the application are separated.

Facility information

4. Provide name of the *primary* person who should be contacted regarding this permit. Provide telephone number and e-mail address for the primary person.
5. Provide name of an *alternate* person who should be contacted if the person listed in 4 is not available. Provide telephone number and e-mail address for the alternate person.
6. Provide the mailing address where DEQ should mail the permit.
7. Provide the physical address where the equipment is located (if different than 6).
8. Indicate if the permitted equipment is portable by checking the appropriate box. If the permitted equipment is portable, complete and attach the Portable Equipment Relocation Form (PERF) to this application. The PERF is available from DEQ's website at http://www.deq.idaho.gov/media/576773-ptc_relocation.pdf or http://www.deq.idaho.gov/media/576769-ptc_relocation.doc (for Word format).
9. Provide the North American Industry Classification System (NAICS) code for your facility. NAICS codes can be found at http://www.census.gov/epcd/naics02/naicod02.htm.
10. Describe the primary activity and principal product of your business as it relates to the NAICS code listed in 9.
11. Identify and describe any other sources or equipment owned and operated by the primary facility that are located on contiguous or adjacent properties and the role the source or equipment plays in supporting the primary facility.
12. Check the box describing the type of permit application.

    Important note: If application is for a permit to construct (PTC), include the application fee of $1,000 when submitting the application. Per IDAPA 58.01.01.226.02, DEQ cannot process the application without the fee, which must be submitted with the application.

    For existing Tier I facilities that are applying for a PTC, the applicant must specify how the PTC will be incorporated into the Tier I permit (IDAPA 58.01.01.209.05). If you have questions, call the Air Permit Hotline at 1-877-573-7648.

Certification

13. Provide the name, title, address, telephone number, and e-mail of the facility's responsible official. Responsible official is defined in IDAPA 58.01.01.006.99. The responsible official must sign and date the application before it is submitted to DEQ.
14. Check this box to indicate that you want to review a draft before the final permit is issued.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Spray Paint Booth Information **Form EU3**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Trails West Manufacturing of Idaho, Inc.	Trails West Manufacturing Facility 2	Have not recieved one

4. Brief Project Description: Install a prime booth at a trailer manufacturing facility (new construction).

BOOTH INFORMATION

5. Booth Type: ☒ New Booth ☐ Unpermitted Existing Booth
☐ Modification to a Permitted Booth, Permit #: , Date Issued:

6. Construction Date: 2/1/2016

SPRAY GUN DESCRIPTION AND SPECIFICATIONS

Gun No.	7. Manufacturer	8. Model	9. Type	10. Transfer Eff. %	11. Rated Capacity (gal/hr)
1	Iwata	LPH 200-LVP	HVLP	65%	6.56
2					
3					
4					

Number of guns to be used simultaneously: 1

SPRAY MATERIAL DESCRIPTION AND SPECIFICATIONS

12. Type of Spray Material Used	13. Type of Material Coated	14. Max. Usage (gal/day)	15. Solid TAP/HAP Content (lb/gal)	16. VOC TAP/HAP Content (lb/gal)	17. MSDS (Y/N)
See attached spreadsheet					

REQUEST FOR PERMIT LIMITATIONS

18. Are you requesting any permit limits? ☒ No ☐ Yes. If Yes, check all that apply below and fill in requested limit(s)

☐ Operation Hour Limits:	☐ Production Limits:
☐ Material Usage Limits:	☐ Other:

19. Rationale for Requesting the Limit(s):

EMISSION CONTROL DEVICE (FILTER[b]) DESCRIPTION AND SPECIFICATIONS

Stack Served	20. Filter Manufacturer	21. Model	22. PM Control Efficiency(%)[a]	23. Dimension (Total Area, Thickness and Number of Filters)
Stack 1	Air Flow Technology	68T	99.7	Total Area: 70 Square Feet Thickness: 2 Inches Number of Filters: 20
Stack 2				
Stack 3				
Stack 4				

Notes: a. Provide either stack test data or vendor's documentation to support the control efficiency specified above.
b. Fill out and submit appropriate control equipment form(s) if this booth has a control device(s) other than a filter system.

BOOTH OPERATING SCHEDULE (indicate hours/day, hours/year, or other)

24. Actual Operation:	25. Maximum Operation:
8 hours per day	16 hours per day

Instructions for Form EU3

Please refer to IDAPA 58.01.01.220 for a list of the general exemption criteria for Permit to Construct exemptions.

1 – 4. Provide the same company name, facility name (if different), facility ID number, and brief project description as on Form CS. This is useful if application pages are separated.

USE ATTACHMENT IF ADDITIONAL SPACE IS REQUIRED.

Booth Information:

5. Check whether this booth is a new booth to be constructed, an unpermitted existing booth (as-built) applying for a permit for the first time, or a permitted source to be modified.

6. Please provide the date of construction of the booth in month/day/year in which construction or modification begins as defined in EU0 Form Instruction item 7.

Spray Gun Description and Specifications:

7. Specify manufacturer(s) of the spray gun(s) used in your booth.

8. Specify the model(s) of the spray gun(s).

9. Indicate the type of the gun(s). The type can be airless, HVLP, air atomization, electrostatic/air atomization, etc.

10. Indicate the transfer efficiency of the painting operation.

11. A rated capacity is the maximum spray rate, usually in unit of oz/min, gal/hour, etc.

Spray Material Description and Specifications (Use Attachment if Additional Space is Required):

12. Indicate all the coating materials used in this booth including enamel, lacquer, clean-up solvent, primer, etc.

13. Indicate all of the types of material that are being coated as being metal, wood, plastic, etc.

14. Indicate the maximum usage of the materials listed in Item 8 in gallons per day.

15. Indicate the maximum solid toxic air pollutant/hazardous air pollutant (TAP/HAP) content that is used, or expected to be used, in pounds per gallon as it is applied.

16. Indicate the maximum volatile organic chemicals (VOC) TAP/HAP content that is used, or expected to be used, in pounds per gallon as it is applied.

17. Product formulation data sheet (provided from the manufacturer) or Material Safety Data Sheet (MSDS) for each painting material used in the booth should be attached with the application.

Request for Permit limitations:

18. If you wish to have permit limits placed on the paint booth, mark "Yes." Check each type of limit that applies to this emission unit and fill in the requested limit. For example, production limits may be in terms of parts produced per year, material usage limits may be in gallons per day.

19. Provide rationale for any requested limit(s). This helps the DEQ and the applicant determine whether the limits are necessary, and whether they will accomplish the desired purpose.

Emission Control Device (filter) Description and Specifications:

20. Provide the name of the filter manufacturer.

21. Provide the model of the filter according to manufacturer's literature.

22. Provide the control efficiency for particulate matter.

23. Provide the dimension of the filter in the total area and total thickness.

Booth Operation Schedule:

24. Provide operation schedule of the booth under a general condition.

25. Provide schedule for projected maximum operation.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Spray Paint Booth Information **Form EU3**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Trails West Manufacturing of Idaho, Inc.	Trails West Manufacturing Facility 2	Have not recieved one

4. Brief Project Description: Install a paint booth at a trailer manufacturing facility (new construction).

BOOTH INFORMATION

5. Booth Type: ☒ New Booth ☐ Unpermitted Existing Booth
☐ Modification to a Permitted Booth, Permit #: , Date Issued:

6. Construction Date: 2/1/2016

SPRAY GUN DESCRIPTION AND SPECIFICATIONS

Gun No.	7. Manufacturer	8. Model	9. Type	10. Transfer Eff. %	11. Rated Capacity (gal/hr)
1	Iwata	LPH 200-LVP	HVLP	65%	6.56
2					
3					
4					

Number of guns to be used simultaneously: 1

SPRAY MATERIAL DESCRIPTION AND SPECIFICATIONS

12. Type of Spray Material Used	13. Type of Material Coated	14. Max. Usage (gal/day)	15. Solid TAP/HAP Content (lb/gal)	16. VOC TAP/HAP Content (lb/gal)	17. MSDS (Y/N)
See attached spreadsheet					

REQUEST FOR PERMIT LIMITATIONS

18. Are you requesting any permit limits? ☒ No ☐ Yes. If Yes, check all that apply below and fill in requested limit(s)

☐ Operation Hour Limits: ☐ Production Limits:

☐ Material Usage Limits: ☐ Other:

19. Rationale for Requesting the Limit(s):

EMISSION CONTROL DEVICE (FILTER[b]) DESCRIPTION AND SPECIFICATIONS

Stack Served	20. Filter Manufacturer	21. Model	22. PM Control Efficiency(%)[a]	23. Dimension (Total Area, Thickness and Number of Filters)
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Stack 2	Air Flow Technology	68T	99.7	Total Area: 60 Square Feet Thickness: 2 Inches Number of Filters: 17
Stack 3	Air Flow Technology	68T	99.7	Total Area: 60 Square Feet Thickness: 2 Inches Number of Filters: 17
Stack 4	Air Flow Technology	68T	99.7	Total Area: 60 Square Feet Thickness: 2 Inches Number of Filters: 17

Notes: a. Provide either stack test data or vendor's documentation to support the control efficiency specified above.
b. Fill out and submit appropriate control equipment form(s) if this booth has a control device(s) other than a filter system.

BOOTH OPERATING SCHEDULE (indicate hours/day, hours/year, or other)

24. Actual Operation: 8 hours per day	25. Maximum Operation: 16 hours per day

Instructions for Form EU3

Please refer to IDAPA 58.01.01.220 for a list of the general exemption criteria for Permit to Construct exemptions.

1 – 4. Provide the same company name, facility name (if different), facility ID number, and brief project description as on Form CS. This is useful if application pages are separated.

USE ATTACHMENT IF ADDITIONAL SPACE IS REQUIRED.

Booth Information:

5. Check whether this booth is a new booth to be constructed, an unpermitted existing booth (as-built) applying for a permit for the first time, or a permitted source to be modified.

6. Please provide the date of construction of the booth in month/day/year in which construction or modification begins as defined in EU0 Form Instruction item 7.

Spray Gun Description and Specifications:

7. Specify manufacturer(s) of the spray gun(s) used in your booth.

8. Specify the model(s) of the spray gun(s).

9. Indicate the type of the gun(s). The type can be airless, HVLP, air atomization, electrostatic/air atomization, etc.

10. Indicate the transfer efficiency of the painting operation.

11. A rated capacity is the maximum spray rate, usually in unit of oz/min, gal/hour, etc.

Spray Material Description and Specifications (Use Attachment if Additional Space is Required):

12. Indicate all the coating materials used in this booth including enamel, lacquer, clean-up solvent, primer, etc.

13. Indicate all of the types of material that are being coated as being metal, wood, plastic, etc.

14. Indicate the maximum usage of the materials listed in Item 8 in gallons per day.

15. Indicate the maximum solid toxic air pollutant/hazardous air pollutant (TAP/HAP) content that is used, or expected to be used, in pounds per gallon as it is applied.

16. Indicate the maximum volatile organic chemicals (VOC) TAP/HAP content that is used, or expected to be used, in pounds per gallon as it is applied.

17. Product formulation data sheet (provided from the manufacturer) or Material Safety Data Sheet (MSDS) for each painting material used in the booth should be attached with the application.

Request for Permit limitations:

18. If you wish to have permit limits placed on the paint booth, mark "Yes." Check each type of limit that applies to this emission unit and fill in the requested limit. For example, production limits may be in terms of parts produced per year, material usage limits may be in gallons per day.

19. Provide rationale for any requested limit(s). This helps the DEQ and the applicant determine whether the limits are necessary, and whether they will accomplish the desired purpose.

Emission Control Device (filter) Description and Specifications:

20. Provide the name of the filter manufacturer.

21. Provide the model of the filter according to manufacturer's literature.

22. Provide the control efficiency for particulate matter.

23. Provide the dimension of the filter in the total area and total thickness.

Booth Operation Schedule:

24. Provide operation schedule of the booth under a general condition.

25. Provide schedule for projected maximum operation.

Trails West Manufacturing Facility Spray Materials Descriptions and Specifications

Product Name	Type of Material Used	Type of Material Coated	Max Usage (gal/day)	Solid TAP/HAP Content (lb/gal)	VOC TAP/HAP Content (lb/gal)	MSDS (Y/N)
106	Thinner	Metal	15.08	0.01	4.40	Yes
130	Thinner	Metal	0.10	0.00	0.00	Yes
131S	Primer	Metal	0.05	39.29	4.60	Yes
15303S	Activator	Metal	1.88	5.81	1.50	Yes
15305S	Activator	Metal	5.19	5.76	1.50	Yes
15307S	Activator	Metal	2.02	5.80	1.50	Yes
15309S	Activator	Metal	0.71	7.40	0.00	Yes
15385S	Reducer	Metal	0.95	0.00	4.10	Yes
15395S	Reducer	Metal	0.23	0.00	4.20	Yes
15397S	Reducer	Metal	0.09	0.00	4.10	Yes
189S	Accelerator	Metal	0.26	0.02	8.10	Yes
19301S	Blender	Metal	0.03	0.53	6.70	Yes
226S	Solvent	Metal	0.01	0.08	0.00	Yes
22806S	Solvent	Metal	0.07	0.26	5.60	Yes
22880S	Primer	Metal	0.11	1.66	1.10	Yes
2350S	Additive	Metal	0.01	4.57	3.40	Yes
29077151	Putty	Metal	0.00	10.47	3.60	Yes
359S	Additive	Metal	0.06	2.00	6.00	Yes
3602S	Thinner	Metal	0.05	0.00	5.40	Yes
389S	Accelerator	Metal	0.03	0.06	8.10	Yes
3900S	Solvent	Metal	1.90	0.00	6.50	Yes
45P7241	Paint	Metal	21.35	0.00	0.00	Yes
45PN0001	Paint	Metal	0.28	0.00	0.00	Yes
7899E	Binder	Metal	0.03	2.44	5.20	Yes
825P30018	Primer	Metal	22.31	8.02	3.20	Yes
848PN5636LG	Paint	Metal	1.95	4.41	2.70	Yes
8989S	Accelerator	Metal	0.05	0.41	7.80	Yes
936S	Activator	Metal	0.05	2.78	1.70	Yes
937S	Activator	Metal	5.04	4.19	3.30	Yes
938S	Activator	Metal	0.27	4.25	3.40	Yes
946S	Activator	Metal	1.17	4.76	2.10	Yes
A-4115S	Primer	Metal	0.10	0.72	3.30	Yes
A	Paint	Metal	0.01	2.63	4.70	Yes
EX	Paint	Metal	1.37	5.13	3.30	Yes
EZ	Paint	Metal	3.29	5.87	3.30	Yes
F	Paint	Metal	0.00	4.58	5.00	Yes
LF-64034P	Paint	Metal	1.11	5.91	3.50	Yes
PT196	Flattener	Metal	0.26	4.30	2.90	Yes
QA	Paint	Metal	0.28	4.77	1.40	Yes
Acryl-R Joint sealer	Caulk	Metal	10.56	NA	3.50	Yes
3M PB938 Adhesive	Adhesive	Metal	0.14	NA	5.67	Yes
3M PB999 Adhesive	Adhesive	Metal	3.23	NA	4.84	Yes

PAINT ARRESTANCE FILTER TEST REPORT

Spray Removal Efficiency & Paint Holding Capacity

Tested for: **Air Flow Technology**

Filter Mfr.: **Air Flow Technology**

Filter Name/Model: **68T**

Report Date: **6-Nov-07**

Test Information

FILTER DESCRIPTION (20" x 20" pad):

2" Polyester

PAINT DESCRIPTION:

High Solids Baking Enamel(S.W.#1 Permaclad 2400,red)

PAINT SPRAY METHOD:

Conventional Air Gun at 40 PSI

SPRAY FEED RATE:

138 gr./min. **130** cc./min.

AIR VELOCITY:

150 FPM

Test Results

INITIAL PRESSURE DROP of Clean Test Filter

0.08 in. water

FINAL PRESSURE DROP of Loaded Test Filter

0.50 in. water

WEIGHT GAIN on TEST FILTER & Test Frame Trough

1969 grams

PAINT HOLDING CAPACITY of TEST FILTER

1793 grams = **4.0** lbs.

PAINT RUN-OFF

176 grams

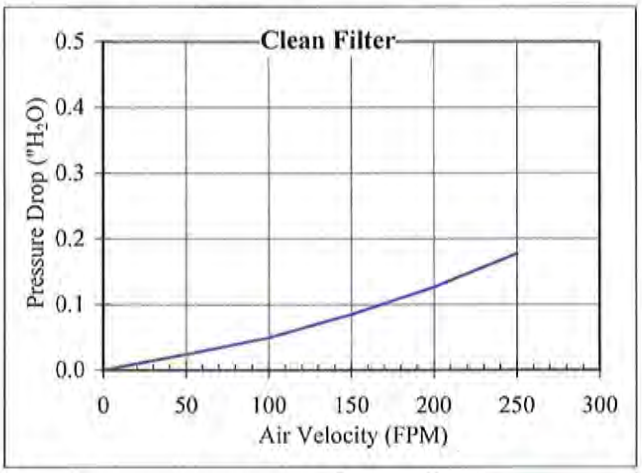
WEIGHT GAIN - FINAL FILTER

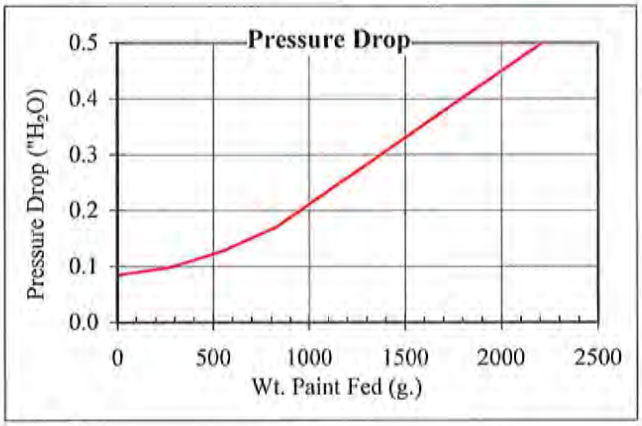
5.9 grams = **PENETRATION**

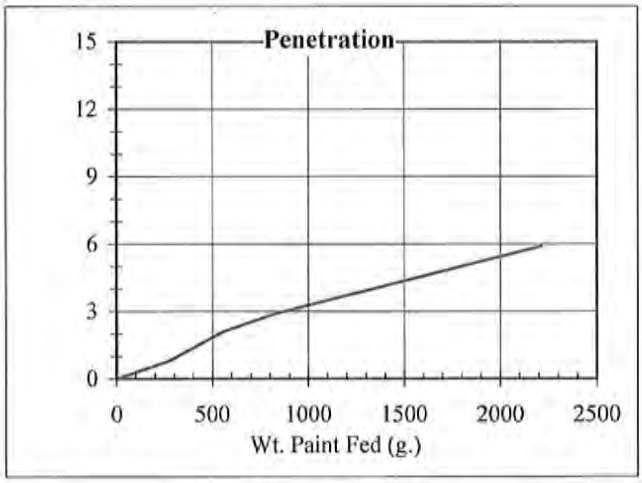
AVERAGE REMOVAL EFFICIENCY of TEST FILTER

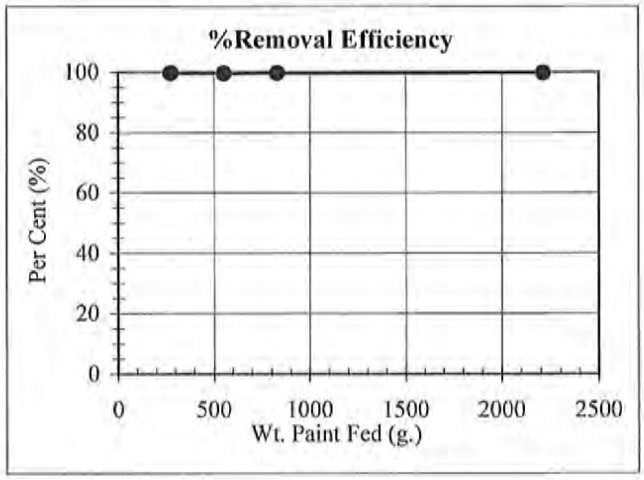
99.70 %

*The document represents filter analyses performed by AFT based upon paint arrestor results of comparable and interchangeable E12 and E12H 2" polyester filter products.









1. Identification of the substance/mixture and of the company/undertaking

Product name	Lacquer Thinner	
Product code	106	Formula Date: 2015-09-24
Intended use	Thinner for professionnal use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Toxicity for reproduction	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 1
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Suspected of damaging fertility or the unborn child.
Highly flammable liquid and vapour.
Causes damage to organs.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye irritation.
Harmful if swallowed or in contact with skin.

Precautionary statements:
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.

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IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF exposed: Call a POISON CENTER or doctor/ physician.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store locked up.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

mixture of solvents

Components

CAS-No.	Chemical Name	Concentration
108-88-3	Toluene	30%
67-64-1	Acetone	26 - 37%
67-56-1	Methyl alcohol	20%
8032-32-4	Vm&p naphtha	4 - 15%
1330-20-7	Xylene	3%
100-41-4	Ethylbenzene	0.8%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.1 - 1.0%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

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Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

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7. Handling and storage

Precautions for safe handling

Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion

Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
108-88-3	Toluene	OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	20 ppm	Skin
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-56-1	Methyl alcohol	ACGIH	15 min	STEL	250 ppm	Skin
			8 hr	TWA	200 ppm	Skin
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	Skin
8032-32-4	Vm&p naphtha	ACGIH	8 hr	TWA	300 ppm	
		Dupont	8 hr	TWA	100 ppm	
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	

** CEIL = Ceiling.
TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

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9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	14 °F	
Lower Explosive Limit	0.9 %	
Upper Explosive Limit	36.5 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	123.3 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	64 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.78	
Specific Gravity	0.81	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	232 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	6.9	
VOC* as packaged (lbs/gal)	4.4	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

Methyl alcohol	Category 3
Xylene	Category 5
Ethylbenzene	Category 5

Acute dermal toxicity

Methyl alcohol	Category 3
Xylene	Category 4

Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 0 %

Skin corrosion/irritation

Toluene	Category 2
Acetone	Category 3
Xylene	Category 2

Serious eye damage/eye irritation

Acetone	Category 2A
Xylene	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

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Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Toluene Category 2

Target Organ Systemic Toxicant - Single exposure

- **Skin Absorption**

  Narcotic effects Toluene
  Eyes Methyl alcohol
  Kidney Methyl alcohol
  Liver Methyl alcohol

- **Inhalation**

  Central nervous system Vm&p naphtha, Methyl alcohol

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Eyes Methyl alcohol
  Central nervous system Methyl alcohol

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Ethylbenzene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

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Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1992
Proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (Acetone; Methyl alcohol)
Hazard Class:	3
Subsidiary Hazard Class:	6.1
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1992
Proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (Acetone; Methyl alcohol)
Hazard Class:	3
Subsidiary Hazard Class:	6.1
Packing group:	II

DOT

UN number:	1992
Proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (Acetone; Methyl alcohol)
Hazard Class:	3
Subsidiary Hazard Class:	6.1
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-D

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

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Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
67-56-1	Methyl alcohol	N	NR	NR	A,C,F	Y	5,000	Y
8032-32-4	Vm&p naphtha	N	NR	NR	A,C,F	N	NR	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.1	2, 11, 15

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T-34014

Version	Changes

Revision Date: 2016-01-25

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Acetone	
Product code	130	Formula Date: 2015-11-24
Intended use	Thinner for professionnal use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

The subtance is hazardous per the following GHS criteria.

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Wear protective gloves/ eye protection/ face protection.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear eye protection/ face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

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B1283/803

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Chemical identification : acetone

CAS-No.	Chemical Name	Concentration
67-64-1	Acetone	92 - 100%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.0 - 0.1%

OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

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5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Do not breathe vapors or mists. If respirator is required to meet applicable exposure limits, use a NIOSH approved respirator in accordance with regulatory requirements (in the US follow OSHA standard 20CFR1910.134) and the respirator manufacturer's directions. If material contains an isocyanate or is used with an isocyanate, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C.)

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

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9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	0 °F	
Lower Explosive Limit	2 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	247.0 hPa	
Water solubility	completely miscible	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	56 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.61	
Specific Gravity	0.79	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	465 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	0.0	
VOC* as packaged (lbs/gal)	0.0	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Acetone	Category 2A

Respiratory sensitisation
not hazardous

Skin sensitisation
not hazardous

Germ cell mutagenicity
not hazardous

Carcinogenicity
not hazardous

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure
No data available.

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Target Organ Systemic Toxicant - Repeated exposure
not hazardous

Aspiration toxicity
not hazardous

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

Acute toxicity aquatic invertebrates

CAS-No.	Chemical Name	Species	Exposure time	Value	Method
67-64-1	Acetone	Daphnia	2 days	10 mg/l	

Acute and extended toxicity of fishes

CAS-No.	Chemical Name	Species	Exposure time	Value	Method
67-64-1	Acetone	Carassius auratus (goldfish)	1 day	5,000 mg/l	
67-64-1	Acetone	Oncorhynchus mykiss (rainbow trout)	4 days	5,540 mg/l	
67-64-1	Acetone	Lepomis macrochirus (Bluegill sunfish)	4 days	8,300 mg/l	

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1090
Proper shipping name:	ACETONE

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Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1090
Proper shipping name:	ACETONE
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1090
Proper shipping name:	ACETONE
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-D

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of

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	Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2

Revision Date: 2016-01-27

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Gray Fill N Sand Primer Surfacer 131S	
Product code	131S	140807
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Card Way Suite 300 US Glen Mills PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Toxicity for reproduction	Category 2
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are ""not classified"", ""cannot classified"" and ""not applicable"" are not shown

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Ground/bond container and receiving equipment.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Obtain special instructions before use.
Take precautionary measures against static discharge.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/ attention.
Specific treatment (see supplemental first aid instructions on this label).
Take off contaminated clothing and wash before reuse.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to .?.

Other hazards which do not result in classification
None known.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
108-88-3	Toluene	16%
1330-20-7	Xylene	9%
141-78-6	Ethyl acetate	
67-63-0	Isopropyl alcohol	
100-41-4	Ethylbenzene	2.2%
27138-31-4	Glycol dibenzoate ester	

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F.
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
108-88-3	Toluene	ACGIH	8 hr	TWA	20 ppm	
		OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	50 ppm	Skin
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	

** TWA = **T**ime-weighted average.
CEIL = Ceiling.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: grey

Flash point	35 °F
Ignition temperature	399 °C
Lower Explosive Limit	1 %
Upper Explosive Limit	12 %
Evapouration rate	Slower than Ether
Vapor pressure of principal solvent	16.9 hPa
Water solubility	moderate
Vapor density of principal solvent (Air = 1)	3.1
Approx. Boiling Range	77 °C
Approx. Freezing Range	Not applicable.
Gallon Weight (lbs/gal)	11.02
Specific Gravity	1.32
Percent Volatile By Volume	63.69%

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Percent Volatile By Weight	41.45%	
Percent Solids By Volume	36.31%	
Percent Solids By Weight	58.55%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	399 °C	DIN 51794
Decomposition temperature		
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	4.6	
VOC* as packaged (lbs/gal)	4.6	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

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Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

toluene	Category 2
xylene	Category 2
ethyl acetate	Category 3
propan-2-ol	Category 3
ethylbenzene	Category 3

Serious eye damage/eye irritation

toluene	Category 2B
xylene	Category 2A
ethyl acetate	Category 2A
propan-2-ol	Category 2A
ethylbenzene	Category 2B

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

toluene	Category 2
Oxydipropyl dibenzoate	Category 2

Target Organ Systemic Toxicant - Single exposure
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Body weight effects ethyl acetate

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Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Titanium dioxide	IARC 2B
ethylbenzene	IARC 2B
carbon black	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.

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B10840730

Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
Warning! This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311 - 312	313	RQ(lbs)	HAP
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
27138-31-4	Glycol dibenzoate ester	N	NR	NR	NA	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

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B10840/30

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
1.1	8, 12, 15, 16

Revision Date: 2014-10-06

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B10840730

1. Identification of the substance/mixture and of the company/undertaking

Product name	Low Temperature Activator	
Product code	15303S	Formula Date: 2012-05-24
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.

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H123/39526

Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
28182-81-2	Aliphatic polyisocyanate resin	59 - 70%
79-20-9	Methyl acetate	15 - 26%
123-86-4	Butyl acetate	4 - 15%
110-12-3	Methyl isoamyl ketone	4 - 15%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.0 - 0.1%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. Skin contact my cause skin sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Do not breathe vapors. Do not get in eyes or on skin. Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TM 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance) Confine and remove with inert absorbent. Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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B129/9526

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Precautions should be taken to avoid exposure to atmospheric humidity or water. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Additional information on storage conditions
Precautions should be taken to avoid exposure to atmospheric humidity or water. Humid air and/or water will produce carbon dioxide which will pressurize the container. Open drum carefully as content may be under pressure.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	

** STEL = Short term exposure limit.

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TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a positive-pressure, supplied air respirator (NIOSH approved TC-19C), while mixing activator with paint, during application and until all vapors and spray mists are exhausted. Follow respirator manufacturer s directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	26 °F	
Lower Explosive Limit	1 %	
Upper Explosive Limit	16 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	37.8 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2.6	
Approx. Boiling Range	55 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.8	
Specific Gravity	1.06	
Percent Volatile By Volume	40.47%	
Percent Volatile By Weight	34.00%	
Percent Solids By Volume	59.54%	
Percent Solids By Weight	66.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	415 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	1.9	
VOC* as packaged (lbs/gal)	1.5	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

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10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
Keep away from oxidising agents and strongly acid or alkaline materials. Amines and alcohols cause exothermic reactions. Mixture reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen as well as hydrogen cyanide, amines, alcohols and water.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

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Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Methyl acetate	Category 2A
Methyl isoamyl ketone	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Aliphatic polyisocyanate resin	Category 1

Germ cell mutagenicity
not hazardous

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
not hazardous

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Based on the properties of the isocyanate components and considering toxicological data on similar products, the following applies: This formulation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Components of the product may be absorbed into the body through the skin.

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B129/9526

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

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TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
28182-81-2	Aliphatic polyisocyanate resin	N	NR	NR	A,C,R	N	NR	N
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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B129/95326

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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
5.0	2, 8, 15

Revision Date: 2016-01-29

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B12979526

1. Identification of the substance/mixture and of the company/undertaking

Product name	Medium Temperature Activator	
Product code	15305S	Formula Date: 2012-05-24
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.

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B12/51887

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
28182-81-2	Aliphatic polyisocyanate resin	59 - 70%
79-20-9	Methyl acetate	15 - 26%
108-83-8	Diisobutyl ketone	4 - 15%
110-43-0	Methyl amyl ketone	4 - 15%
19549-80-5	4,6-dimethyl-2-heptanone	1 - 4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.1 - 1.0%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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B12751867

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. Skin contact my cause skin sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Do not breathe vapors. Do not get in eyes or on skin. Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TM 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance) Confine and remove with inert absorbent. Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Precautions should be taken to avoid exposure to atmospheric humidity or water. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Additional information on storage conditions
Precautions should be taken to avoid exposure to atmospheric humidity or water. Humid air and/or water will produce carbon dioxide which will pressurize the container. Open drum carefully as content may be under pressure.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
108-83-8	Diisobutyl ketone	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	50 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	

** STEL = Short term exposure limit.

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TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a positive-pressure, supplied air respirator (NIOSH approved TC-19C), while mixing activator with paint, during application and until all vapors and spray mists are exhausted. Follow respirator manufacturer s directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	25 °F	
Lower Explosive Limit	0.8 %	
Upper Explosive Limit	16 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	35.8 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2.6	
Approx. Boiling Range	55 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.72	
Specific Gravity	1.04	
Percent Volatile By Volume	41.06%	
Percent Volatile By Weight	34.00%	
Percent Solids By Volume	58.94%	
Percent Solids By Weight	66.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	345 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	1.9	
VOC* as packaged (lbs/gal)	1.5	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

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10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
Keep away from oxidising agents and strongly acid or alkaline materials. Amines and alcohols cause exothermic reactions. Mixture reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen as well as hydrogen cyanide, amines, alcohols and water.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

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Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Methyl acetate Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Aliphatic polyisocyanate resin Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Respiratory system Diisobutyl ketone, Methyl acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

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Symptoms related to the physical, chemical and toxicological characteristics
Based on the properties of the isocyanate components and considering toxicological data on similar products, the following applies: This formulation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Components of the product may be absorbed into the body through the skin.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

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Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
28182-81-2	Aliphatic polyisocyanate resin	N	NR	NR	A,C,R	N	NR	N
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
108-83-8	Diisobutyl ketone	N	NR	NR	C,F	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
19549-80-5	4,6-dimethyl-2-heptanone	N	NR	NR	NA	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.

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OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
10.1	3

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	High Temperature Activator	
Product code	15307S	Formula Date: 2012-05-24
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
28182-81-2	Aliphatic polyisocyanate resin	59 - 70%
79-20-9	Methyl acetate	15 - 26%
103-09-3	2-ethylhexyl acetate	4 - 15%
108-83-8	Diisobutyl ketone	4 - 15%
19549-80-5	4,6-dimethyl-2-heptanone	1 - 4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.1 - 1.0%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. Skin contact my cause skin sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Do not breathe vapors. Do not get in eyes or on skin. Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TM 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance) Confine and remove with inert absorbent. Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Precautions should be taken to avoid exposure to atmospheric humidity or water. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Additional information on storage conditions
Precautions should be taken to avoid exposure to atmospheric humidity or water. Humid air and/or water will produce carbon dioxide which will pressurize the container. Open drum carefully as content may be under pressure.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
108-83-8	Diisobutyl ketone	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	50 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

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Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a positive-pressure, supplied air respirator (NIOSH approved TC-19C), while mixing activator with paint, during application and until all vapors and spray mists are exhausted. Follow respirator manufacturer s directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	23 °F	
Lower Explosive Limit	0.8 %	
Upper Explosive Limit	16 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	36.0 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2.6	
Approx. Boiling Range	55 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.79	
Specific Gravity	1.05	
Percent Volatile By Volume	40.58%	
Percent Volatile By Weight	34.00%	
Percent Solids By Volume	59.42%	
Percent Solids By Weight	66.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	1.9	
VOC* as packaged (lbs/gal)	1.5	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

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Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
Keep away from oxidising agents and strongly acid or alkaline materials. Amines and alcohols cause exothermic reactions. Mixture reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen as well as hydrogen cyanide, amines, alcohols and water.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

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Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Methyl acetate	Category 2A
2-ethylhexyl acetate	Category 2B

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Aliphatic polyisocyanate resin	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system Diisobutyl ketone, Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Based on the properties of the isocyanate components and considering toxicological data on similar products, the following applies: This formulation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Components of the product may be absorbed into the body through the skin.

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Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

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TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
28182-81-2	Aliphatic polyisocyanate resin	N	NR	NR	A,C,R	N	NR	N
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
108-83-8	Diisobutyl ketone	N	NR	NR	C,F	N	NR	N
19549-80-5	4,6-dimethyl-2-heptanone	N	NR	NR	NA	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
6.0	2, 8, 15

Revision Date: 2016-01-29

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B12979496

1. Identification of the substance/mixture and of the company/undertaking

Product name	Low VOC Activator	
Product code	15309S	Formula Date: 2012-05-24
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.

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Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
28182-81-2	Aliphatic polyisocyanate resin	70 - 81%
79-20-9	Methyl acetate	15 - 26%
822-06-0	1,6-hexamethylene diisocyanate	0.1%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.0 - 0.1%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

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Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. Skin contact my cause skin sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Do not breathe vapors. Do not get in eyes or on skin. Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TM 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance) Confine and remove with inert absorbent. Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Precautions should be taken to avoid exposure to atmospheric humidity or water. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Additional information on storage conditions
Precautions should be taken to avoid exposure to atmospheric humidity or water. Humid air and/or water will produce carbon dioxide which will pressurize the container. Open drum carefully as content may be under pressure.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
822-06-0	1,6-hexamethylene diisocyanate	ACGIH	8 hr	TWA	5 ppb	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

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Respiratory protection
Do not breathe vapors or mists. Wear a positive-pressure, supplied air respirator (NIOSH approved TC-19C), while mixing activator with paint, during application and until all vapors and spray mists are exhausted. Follow respirator manufacturer s directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	19 °F	
Lower Explosive Limit	3.1 %	
Upper Explosive Limit	16 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	43.4 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2.6	
Approx. Boiling Range	55 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	9.25	
Specific Gravity	1.11	
Percent Volatile By Volume	23.73%	
Percent Volatile By Weight	20.00%	
Percent Solids By Volume	76.27%	
Percent Solids By Weight	80.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	445 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	0.0	
VOC* as packaged (lbs/gal)	0.0	

Does not sustain combustion.

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

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Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
Keep away from oxidising agents and strongly acid or alkaline materials. Amines and alcohols cause exothermic reactions. Mixture reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen as well as hydrogen cyanide, amines, alcohols and water.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

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Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Methyl acetate	Category 2A
1,6-hexamethylene diisocyanate	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Aliphatic polyisocyanate resin	Category 1
1,6-hexamethylene diisocyanate	Category 1

Germ cell mutagenicity
not hazardous

Carcinogenicity
not hazardous

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system 1,6-hexamethylene diisocyanate, Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
not hazardous

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Based on the properties of the isocyanate components and considering toxicological data on similar products, the following applies: This formulation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Components of the product may be absorbed into the body through the skin.

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Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

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TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
28182-81-2	Aliphatic polyisocyanate resin	N	NR	NR	A,C,R	N	NR	N
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
822-06-0	1,6-hexamethylene diisocyanate	N	NR	NR	C	Y	100	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
6.0	2, 8, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Medium Temperature Reducer	
Product code	15385S	Formula Date: 2014-08-14
Intended use	Solvent for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Wear protective gloves/ eye protection/ face protection.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear eye protection/ face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

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Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

mixture of solvents

Components

CAS-No.	Chemical Name	Concentration
67-64-1	Acetone	37 - 48%
110-12-3	Methyl isoamyl ketone	15 - 26%
108-65-6	Propylene glycol monomethyl ether acetate	15 - 26%
64742-95-6	Aromatic hydrocarbon	4 - 15%
123-86-4	Butyl acetate	4 - 15%
95-63-6	1,2,4-trimethyl benzene	3%
98-82-8	Cumene	0.2%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 1 - 5%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

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Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

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7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	
108-65-6	Propylene glycol monomethyl ether acetate	Dupont	15 min	TWA	30 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	25 ppm	
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	13 °F
Lower Explosive Limit	0.9 %
Upper Explosive Limit	12.8 %
Evapouration rate	Slower than Ether
Vapor pressure of principal solvent	107.5 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	2

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Approx. Boiling Range	. 125 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.02	
Specific Gravity	0.84	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	272 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	7.3	
VOC* as packaged (lbs/gal)	4.1	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

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Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Acetone	Category 2A
Methyl isoamyl ketone	Category 2A
1,2,4-trimethyl benzene	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system Propylene glycol monomethyl ether acetate, 1,2,4-trimethyl benzene, Cumene

  Central nervous system 1,2,4-trimethyl benzene

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Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Cumene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL

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Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
108-65-6	Propylene glycol monomethyl ether acetate	N	NR	NR	F	N	NR	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity

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NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2, 11

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	High Temperature Reducer	
Product code	15395S	Formula Date: 2014-08-14
Intended use	Solvent for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

mixture of solvents

Components

CAS-No.	Chemical Name	Concentration
103-09-3	2-ethylhexyl acetate	37 - 48%
67-64-1	Acetone	37 - 48%
141-78-6	Ethyl acetate	4 - 15%
78-93-3	Methyl ethyl ketone	4 - 15%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.0 - 0.1%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

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Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

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7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
78-93-3	Methyl ethyl ketone	ACGIH	8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	

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** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	10 °F	
Lower Explosive Limit	1 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	118.8 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	70 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.95	
Specific Gravity	0.83	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	7.2	
VOC* as packaged (lbs/gal)	4.2	

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* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

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Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

2-ethylhexyl acetate	Category 2
Acetone	Category 3
Ethyl acetate	Category 3
Methyl ethyl ketone	Category 3

Serious eye damage/eye irritation

2-ethylhexyl acetate	Category 2B
Acetone	Category 2A
Ethyl acetate	Category 2A
Methyl ethyl ketone	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
not hazardous

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  reproductive organs Ethyl acetate

Target Organ Systemic Toxicant - Repeated exposure
not hazardous

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

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Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

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TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our

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knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2, 8

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Very High Temperature Reducer	
Product code	15397S	Formula Date: 2014-08-14
Intended use	Solvent for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria ·

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

mixture of solvents

Components

CAS-No.	Chemical Name	Concentration
103-09-3	2-ethylhexyl acetate	37 - 48%
67-64-1	Acetone	37 - 48%
110-43-0	Methyl amyl ketone	4 - 15%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.0 - 0.1%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

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Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

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Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

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Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	17 °F	
Lower Explosive Limit	1.1 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	99.5 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	5.9	
Approx. Boiling Range	152 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.92	
Specific Gravity	0.83	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	7.1	
VOC* as packaged (lbs/gal)	4.1	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

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Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

2-ethylhexyl acetate	Category 2
Acetone	Category 3

Serious eye damage/eye irritation

2-ethylhexyl acetate	Category 2B
Acetone	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

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Germ cell mutagenicity
not hazardous

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone

  Narcotic effects Methyl amyl ketone

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone

  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
not hazardous

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

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14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation

Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status

In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status

All components of the mixture are listed on the DSL.

Photochemical Reactivity

Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N

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Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Accelerator	
Product code	189S	Formula Date: 2003-04-04
Intended use	Intermediate	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 3
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 3
Acute inhalation toxicity	Category 3
Skin sensitisation	Category 1
Toxicity for reproduction	Category 1B

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Harmful if swallowed. May damage fertility or the unborn child. Flammable liquid and vapour. May cause an allergic skin reaction. Toxic in contact with skin or if inhaled
Precautionary statements	Do not eat, drink or smoke when using this product. Avoid breathing dust/ vapours/ spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Remove/Take off immediately all contaminated clothing. IF ON SKIN: Wash with plenty of soap and water.

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IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/ attention.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
123-54-6	2,4-pentanedione	92 - 100%
77-58-7	Dibutyl tin dilaurate	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 0.0 - 0.1%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

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Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

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7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-54-6	2,4-pentanedione	ACGIH	8 hr	TWA	25 ppm	Skin
		Dupont	8 & 12 hour	TWA	5 ppm	
77-58-7	Dibutyl tin dilaurate	ACGIH	15 min	STEL	0.2 mg/m3	Sn
			8 hr	TWA	0.1 mg/m3	Sn
		OSHA	8 hr	TWA	0.1 mg/m3	Sn

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

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Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear Odour: Characteristic Paint Odor

Flash point	87 °F	
Lower Explosive Limit	1.7 %	
Upper Explosive Limit	11.6 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	9.0 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	3.5	
Approx. Boiling Range	135 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.14	
Specific Gravity	0.98	
Percent Volatile By Volume	99.75%	
Percent Volatile By Weight	99.73%	
Percent Solids By Volume	0.25%	
Percent Solids By Weight	0.27%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	350 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	8.1	
VOC* as packaged (lbs/gal)	8.1	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

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Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

2,4-pentanedione	Category 4

Acute dermal toxicity

2,4-pentanedione	Category 3

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Acute inhalation toxicity

2,4-pentanedione Category 3

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation
Not classified according to GHS criteria

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Dibutyl tin dilaurate Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Dibutyl tin dilaurate Category 1B

Target Organ Systemic Toxicant - Single exposure
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

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12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

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Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
123-54-6	2,4-pentanedione	N	NR	NR	A,C,F	N	NR	N
77-58-7	Dibutyl tin dilaurate	N	NR	NR	NA	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
7.0	2

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Version	Changes

Revision Date: 2015-11-30

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Clearcoat Blender	
Product code	19301S	Formula Date: 2013-08-08
Intended use	Intermediate	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Toxicity for reproduction	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 3
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Suspected of damaging fertility or the unborn child.
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
108-65-6	Propylene glycol monomethyl ether acetate	26 - 37%
108-10-1	Methyl isobutyl ketone	15.7%
108-88-3	Toluene	13%
1330-20-7	Xylene	13%
67-63-0	Isopropyl alcohol	4 - 15%
100-41-4	Ethylbenzene	3.3%
67-64-1	Acetone	1 - 4%
123-86-4	Butyl acetate	1 - 4%
110-43-0	Methyl amyl ketone	1 - 4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 5 - 10%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

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Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.
During baking at temperatures above 400°C, small amounts of hydrogen fluoride can be evolved; these amounts increase as temperatures increase. Hydrogen fluoride vapours are very toxic and cause skin and eye irritation. Above 430°C an explosive reaction may occur if finely divided fluorocarbon comes into contact with metal powder (aluminium or magnesium). Operations such as grinding, buffing or grit blasting may generate such mixtures. Avoid any dust buildup with fluorocarbons and metal mixtures.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
108-65-6	Propylene glycol monomethyl ether acetate	Dupont	15 min	TWA	30 ppm	
108-10-1	Methyl isobutyl ketone	ACGIH	15 min	STEL	75 ppm	
			8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
108-88-3	Toluene	OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	20 ppm	Skin
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	

** TWA = Time-weighted average.
STEL = Short term exposure limit.
CEIL = Ceiling.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

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Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	49 °F	
Lower Explosive Limit	1 %	
Upper Explosive Limit	12 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	20.2 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	4.6	
Approx. Boiling Range	83 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.34	
Specific Gravity	0.88	
Percent Volatile By Volume	94.34%	
Percent Volatile By Weight	92.79%	
Percent Solids By Volume	5.67%	
Percent Solids By Weight	7.21%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	272 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	6.8	
VOC* as packaged (lbs/gal)	6.7	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

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RK-34087

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
In the event of fire Carbon monoxide, fluorinated hydrocarbons, hydrogen fluoride, nitrogen oxides may be formed.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 0 %

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Skin corrosion/irritation

Methyl isobutyl ketone	Category 3
Toluene	Category 2
Xylene	Category 2
Acetone	Category 3
Butyl acetate	Category 3

Serious eye damage/eye irritation

Methyl isobutyl ketone	Category 2A
Xylene	Category 2A
Isopropyl alcohol	Category 2A
Acetone	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Toluene	Category 2

Target Organ Systemic Toxicant - Single exposure

- **Skin Absorption**

  Narcotic effects Toluene

- **Inhalation**

  airway sensitivity Methyl amyl ketone

  Narcotic effects Methyl amyl ketone

  Respiratory system Isopropyl alcohol, Propylene glycol monomethyl ether acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone

  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
No data available.

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

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Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Methyl isobutyl ketone	IARC 2B
Ethylbenzene	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

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HK-34087

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
108-65-6	Propylene glycol monomethyl ether acetate	N	NR	NR	F	N	NR	N
108-10-1	Methyl isobutyl ketone	N	NR	NR	A,C,F,N,R	Y	5,000	Y
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

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16. Other information

HMIS rating H: 2 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
6.0	2, 11, 15, 16

Revision Date: 2016-01-29

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HK-3408 /

1. Identification of the substance/mixture and of the company/undertaking

Product name	Aluminum Conversion Coating Step B	
Product code	226S	Formula Date: 2016-01-13
Intended use	Cleaning agent for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Skin corrosion/irritation	Category 1A
Serious eye damage/eye irritation	Category 1
Respiratory sensitisation	Category 1
Skin sensitisation	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B
Toxicity for reproduction	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause an allergic skin reaction. Causes severe skin burns and eye damage. Causes serious eye damage.
Precautionary statements	In case of inadequate ventilation wear respiratory protection. Obtain special instructions before use. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust or mist. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF exposed or concerned: Get medical advice/ attention. Specific treatment (see supplemental first aid instructions on this label). If skin irritation or rash occurs: Get medical advice/ attention. Immediately call a POISON CENTER or doctor/ physician. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of solvents and special additives

Components

CAS-No.	Chemical Name	Concentration
7738-94-5	Chromic acid	1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 90 - 100%
OSHA Hazardous: No

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

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Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Avoid heating above flash point.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. If heated above the flashpoint, remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Close container after each use. If heated above its flash point, this must be handled as if it were a flammable liquid. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not freeze.
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

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Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IIIB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits
The product contains no substances classified as hazardous to health by an OEL value in concentrations which should be taken into account.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

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Appearance

Form: liquid Colour: clear Odour: Characteristic Paint Odor

Flash point	> 200 °F	
Lower Explosive Limit	Not applicable.	
Upper Explosive Limit	Not applicable.	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	Not applicable.	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	0	
Approx. Boiling Range	Not applicable.	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.37	
Specific Gravity	1.00	
Percent Volatile By Volume	99.24%	
Percent Volatile By Weight	99.00%	
Percent Solids By Volume	0.76%	
Percent Solids By Weight	1.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	Not applicable.	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	0.0	
VOC* as packaged (lbs/gal)	0.0	

Does not sustain combustion.

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
If heated above the flash point, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 0 %

Skin corrosion/irritation

Chromic acid	Category 1A

Serious eye damage/eye irritation

Chromic acid	Category 1

Respiratory sensitisation

Chromic acid	Category 1

Skin sensitisation

Chromic acid	Category 1

Germ cell mutagenicity

Chromic acid	Category 2

Carcinogenicity

Chromic acid	Category 1B

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Toxicity for reproduction

Chromic acid	Category 2

Target Organ Systemic Toxicant - Single exposure
not hazardous

Target Organ Systemic Toxicant - Repeated exposure
not hazardous

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
No information available.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

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Photochemical Reactivity
Non-photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
7738-94-5	Chromic acid	N	NR	NR	C	Y	10	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 1 F: 1 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

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Version	Changes
2.0	2, 9

Revision Date: 2016-01-27

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12500016629

1. Identification of the substance/mixture and of the company/undertaking

Product name	LOW VOC ETCH PRIMER CONVERTOR	
Product code	22806S	130828
Intended use	Solvent for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Card Way Suite 300 US Glen Mills PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(800) 438-3876 (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Toxicity for reproduction	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 1
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are ""not classified"", ""cannot classified"" and ""not applicable"" are not shown

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Suspected of damaging fertility or the unborn child.
Causes damage to organs.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:
Do not breathe dust or mist.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Do not eat, drink or smoke when using this product.
Ground/bond container and receiving equipment.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Obtain special instructions before use.
Take precautionary measures against static discharge.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.

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Wear protective gloves/protective clothing/eye protection/face protection.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
Specific treatment (see supplemental first aid instructions on this label).
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to .?.

Other hazards which do not result in classification
None known.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
71-36-3	N-butyl alcohol	39%
67-64-1	Acetone	
64-17-5	Ethyl alcohol	
142-82-5	Heptane	
141-78-6	Ethyl acetate	
67-56-1	Methyl alcohol	1%
7664-38-2	Phosphoric acid	
108-88-3	Toluene	1%
108-10-1	Methyl isobutyl ketone	0.3%

Non-regulated ingredients 1 - 5%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

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Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

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7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F.
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
64-17-5	Ethyl alcohol	ACGIH	8 hr	TWA	1,000 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	1,000 ppm	
				TWA	1,000 ppm	
142-82-5	Heptane	ACGIH	15 min	STEL	500 ppm	
			8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	500 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
67-56-1	Methyl alcohol	ACGIH	15 min	STEL	250 ppm	Skin
			8 hr	TWA	200 ppm	Skin
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	Skin
7664-38-2	Phosphoric acid	ACGIH	15 min	STEL	3 mg/m3	
			8 hr	TWA	1 mg/m3	
		OSHA	8 hr	TWA	1 mg/m3	
		Dupont	15 min	TWA	3 mg/m3	
			8 & 12 hour	TWA	1 mg/m3	
108-88-3	Toluene	ACGIH	8 hr	TWA	20 ppm	
		OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	50 ppm	Skin
108-10-1	Methyl isobutyl ketone	ACGIH	15 min	STEL	75 ppm	
			8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	

** TWA = Time-weighted average.
STEL = Short term exposure limit.
CEIL = Ceiling.

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Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear

Flash point	< 20 °F	
Ignition temperature	215 °C	
Lower Explosive Limit	1 %	
Upper Explosive Limit	21.2 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	69.9 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2.6	
Approx. Boiling Range	75 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.81	
Specific Gravity	0.82	
Percent Volatile By Volume	98.41%	
Percent Volatile By Weight	96.16%	
Percent Solids By Volume	1.59%	
Percent Solids By Weight	3.84%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	215 °C	DIN 51794
Decomposition temperature		
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	6.5	
VOC* as packaged (lbs/gal)	5.0	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

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Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

n-butanol	Category 4
methanol	Category 3
phosphoric acid	Category 4
4-methylpentan-2-one	Category 5

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

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Skin corrosion/irritation

n-butanol	Category 2
acetone	Category 3
heptane (mixture of isomers)	Category 2
ethyl acetate	Category 3
phosphoric acid	Category 1A
toluene	Category 2
4-methylpentan-2-one	Category 3

Serious eye damage/eye irritation

n-butanol	Category 1
acetone	Category 2A
ethanol	Category 2A
heptane (mixture of isomers)	Category 2A
ethyl acetate	Category 2A
methanol	Category 2A
phosphoric acid	Category 1
toluene	Category 2B
4-methylpentan-2-one	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

toluene Category 2

Target Organ Systemic Toxicant - Single exposure

- **Skin Absorption**

  Narcotic effects toluene
  Eyes methanol
  Kidney methanol
  Liver methanol

- **Inhalation**

  Central nervous system methanol
  reproductive organs ethyl acetate, heptane (mixture of isomers)

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Body weight effects ethyl acetate
  Eyes methanol
  Central nervous system methanol

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Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

4-methylpentan-2-one IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

Acute toxicity aquatic invertebrates

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
67-64-1	Acetone	Daphnia	2 days	10 mg/l		
142-82-5	Heptane	Daphnia	24 h	10 mg/l	LC50	
108-88-3	Toluene	Water flea	1 day	100 ppm		
108-87-2	Cyclohexane, methyl-	Daphnia	72 h	6 mg/l	LC50	
71-43-2	Benzene	Daphnia	48 h	9.2 mg/l	EC50	
100-41-4	Ethylbenzene	Daphnia	48 h	1.8 mg/l	EC50	
108-10-1	Methyl isobutyl ketone	Daphnia	1 days	1,550 mg/l		
1330-20-7	Xylene	Water flea	1 days	10 mg/l	EC50	
1330-20-7	Xylene	Daphnia	1 days	10 mg/l	EC50	

Acute and extended toxicity of fishes

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
71-36-3	N-butyl alcohol	Carassius auratus (goldfish)	1 day	1,000 mg/kg		
71-36-3	N-butyl alcohol	Leuciscus idus (Golden orfe)	2 days	1,770 mg/kg		
64-17-5	Ethyl alcohol	Carassius auratus (goldfish)	96 h	140 mg/l	LC50	
67-64-1	Acetone	Carassius auratus (goldfish)	1 day	5,000 mg/l		
67-64-1	Acetone	Oncorhynchus mykiss (rainbow trout)	4 days	5,540 mg/l		
67-64-1	Acetone	Lepomis macrochirus (Bluegill sunfish)	4 days	8,300 mg/l		
142-82-5	Heptane	Oncorhynchus mykiss (rainbow trout)	4 days	15 ppm		

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CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
142-82-5	Heptane	Lepomis macrochirus (Bluegill sunfish)	1 days	2,990 ppm		
141-78-6	Ethyl acetate	Pimephales promelas (fathead minnow)	4 days	230 mg/l		
141-78-6	Ethyl acetate	Leuciscus idus (Golden orfe)	2 days	270 mg/l		
141-78-6	Ethyl acetate	Oncorhynchus mykiss (rainbow trout)	4 days	425 mg/l		
67-56-1	Methyl alcohol	Pimephales promelas (fathead minnow)	4 days	28,100 mg/l		
7664-38-2	Phosphoric acid		96 h	138 mg/l	LC50	
108-88-3	Toluene	Pimephales promelas (fathead minnow)	4 days	32 mg/l		
108-88-3	Toluene	Lepomis macrochirus (Bluegill sunfish)	4 days	60 ppm		
108-88-3	Toluene	Carassius auratus (goldfish)	4 days	60 ppm		
71-43-2	Benzene	Oncorhynchus mykiss (rainbow trout)	96 h	5.9 mg/l	LC50	
100-41-4	Ethylbenzene	Oncorhynchus mykiss (rainbow trout)	96 h	4.2 mg/l	LC50	
78-83-1	Isobutyl alcohol	Leuciscus idus (Golden orfe)	2 days	1,220 mg/l		
78-83-1	Isobutyl alcohol	Pimephales promelas (fathead minnow)	4 days	1,600 mg/l		
108-10-1	Methyl isobutyl ketone	Carassius auratus (goldfish)	1 days	460 mg/l	LC50	
108-10-1	Methyl isobutyl ketone	Pimephales promelas (fathead minnow)	4 days	505 ppm	LC50	
108-10-1	Methyl isobutyl ketone	Leuciscus idus (Golden orfe)	2 days	672 mg/l	LC50	
110-54-3	N-hexane		96 h	1 mg/l	LC50	
1330-20-7	Xylene	Pimephales promelas (fathead minnow)	4 days	21 mg/l	EC50	
1330-20-7	Xylene	Lepomis macrochirus (Bluegill sunfish)	4 days	22 mg/l	EC50	
1330-20-7	Xylene	Carassius auratus (goldfish)	4 days	24 mg/l	EC50	

Toxicity with aquatic plants

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
71-36-3	N-butyl alcohol	Daphnia	1 day	1,855 mg/kg		
141-78-6	Ethyl acetate	Daphnia	2 days	230 mg/l		

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CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
71-43-2	Benzene	green algae (type not specified)	72 h	29 mg/l	IC50	
100-41-4	Ethylbenzene	green algae (type not specified)	72 h	4.6 mg/l	EC50	
78-83-1	Isobutyl alcohol	Daphnia	2 days	1,994 mg/l		
110-54-3	N-hexane	Algae	0	1 mg/l	LC50	

Mobility
No information available.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [heptane (mixture of isomers)]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [heptane (mixture of isomers)]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

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15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311 - 312	313	RQ(lbs)	HAP
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
64-17-5	Ethyl alcohol	N	NR	NR	A,C,F	N	NR	N
142-82-5	Heptane	N	NR	NR	A,C,F	N	NR	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
67-56-1	Methyl alcohol	N	NR	NR	A,C,F	Y	5,000	Y
7664-38-2	Phosphoric acid	N	NR	NR	N	N	5,000	N
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
108-10-1	Methyl isobutyl ketone	N	NR	NR	A,C,F	Y	5,000	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.

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PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
5.0	2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15

Revision Date: 2014-05-16

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Low VOC Etch Primer	
Product code	22880S	Formula Date: 2014-07-31
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Highly flammable liquid and vapour. May cause respiratory irritation. May cause drowsiness or dizziness. May cause an allergic skin reaction. Causes skin irritation. Causes serious eye damage.
Precautionary statements	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ vapours/ spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label).

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If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
Immediately call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
67-64-1	Acetone	37 - 48%
98-56-6	4-chlorobenzotrifluoride	15 - 26%
71-36-3	N-butyl alcohol	5%
25036-25-3	Bisphenol a/epichlorohydrin poly mn 700 - 1200 g/mol	4 - 15%
67-63-0	Isopropyl alcohol	4 - 15%
1314-13-2	Zinc oxide	3%
13463-67-7	Titanium dioxide	1.3%
1330-20-7	Xylene	1%
100-41-4	Ethylbenzene	0.3%
1333-86-4	Carbon black	0.2%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 10 - 20%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

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Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

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Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.
During baking at temperatures above 400°C, small amounts of hydrogen fluoride can be evolved; these amounts increase as temperatures increase. Hydrogen fluoride vapours are very toxic and cause skin and eye irritation. Above 430°C an explosive reaction may occur if finely divided fluorocarbon comes into contact with metal powder (aluminium or magnesium). Operations such as grinding, buffing or grit blasting may generate such mixtures. Avoid any dust buildup with fluorocarbons and metal mixtures.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
98-56-6	4-chlorobenzotrifluoride	Dupont	8 & 12 hour	TWA	20 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
25036-25-3	Bisphenol a/epichlorohydrin poly mn 700 - 1200 g/mol	ACGIH	8 hr	TWA	10 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust
		OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust
1314-13-2	Zinc oxide	ACGIH	15 min	STEL	10 mg/m3	Respirable Dust
			8 hr	TWA	2 mg/m3	Respirable Dust
		OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust
13463-67-7	Titanium dioxide	OSHA	8 hr	TWA	15 mg/m3	Total Dust
		Dupont	8 & 12 hour	TWA	10 mg/m3	Total Dust
			8 & 12 hour	TWA	5 mg/m3	Respirable Dust
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
1333-86-4	Carbon black	ACGIH	8 hr	TWA	3 mg/m3	
		OSHA	8 hr	TWA	3.5 mg/m3	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		Dupont	8 & 12 hour	TWA	0.5 mg/m3	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: green

Flash point	8 °F	
Lower Explosive Limit	0.9 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	118.6 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	56 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.17	
Specific Gravity	0.98	
Percent Volatile By Volume	87.76%	
Percent Volatile By Weight	79.67%	
Percent Solids By Volume	12.24%	
Percent Solids By Weight	20.34%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	340 °C	DIN 51794
Decomposition temperature	Not applicable.	

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Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.8	
VOC* as packaged (lbs/gal)	1.1	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
The product contains ingredients which, under certain conditions, also may release formaldehyde. If necessary, the precise concentration has to be be determined. In the event of fire Carbon monoxide, fluorinated hydrocarbons, hydrogen fluoride, nitrogen oxides may be formed.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

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Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

Acetone	Category 3
4-chlorobenzotrifluoride	Category 2
N-butyl alcohol	Category 2
Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	Category 2
Xylene	Category 2

Serious eye damage/eye irritation

Acetone	Category 2A
4-chlorobenzotrifluoride	Category 2A
N-butyl alcohol	Category 1
Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	Category 2A
Isopropyl alcohol	Category 2A
Xylene	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system Isopropyl alcohol

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

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Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. Low molecular epoxy constituents are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Avoid skin and eye contact. Avoid inhalation of vapour or mist.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Titanium dioxide	IARC 2B
Ethylbenzene	IARC 2B
Carbon black	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [zinc oxide]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.

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Packing group:	II
Marine Pollutant:	yes [zinc oxide]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
Product is not DSL listed because one or more ingredients are not on the DSL inventory.

Photochemical Reactivity
Non-photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
98-56-6	4-chlorobenzotrifluoride	N	NR	NR	C,F,P	N	NR	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
25036-25-3	Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	N	NR	NR	C	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
1314-13-2	Zinc oxide	N	NR	NR	A,C,F,N,R	Y	1,000	N
13463-67-7	Titanium dioxide	N	NR	NR	A	N	NR	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
1333-86-4	Carbon black	N	NR	NR	C	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.

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RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
7.2	2, 11, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Flexible Additive	
Product code	2350S	Formula Date: 2010-11-08
Intended use	Intermediate	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
78-93-3	Methyl ethyl ketone	15 - 26%
64742-95-6	Aromatic hydrocarbon	4 - 15%
123-86-4	Butyl acetate	4 - 15%
110-43-0	Methyl amyl ketone	4 - 15%
95-63-6	1,2,4-trimethyl benzene	3%
98-82-8	Cumene	0.2%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	0.0 - 1.0%
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

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Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

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Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
78-93-3	Methyl ethyl ketone	ACGIH	8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	25 ppm	
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear Odour: Characteristic Paint Odor

Flash point	50 °F
Lower Explosive Limit	0.9 %
Upper Explosive Limit	11 %
Evapouration rate	Slower than Ether
Vapor pressure of principal solvent	19.4 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	2.5

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Approx. Boiling Range	78 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.02	
Specific Gravity	0.96	
Percent Volatile By Volume	49.74%	
Percent Volatile By Weight	43.01%	
Percent Solids By Volume	50.26%	
Percent Solids By Weight	57.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	393 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.4	
VOC* as packaged (lbs/gal)	3.4	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

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Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
Not classified according to GHS criteria

Acute dermal toxicity
Not classified according to GHS criteria

Acute inhalation toxicity
Not classified according to GHS criteria

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Methyl ethyl ketone	Category 2A
1,2,4-trimethyl benzene	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Category 1
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Respiratory system 1,2,4-trimethyl benzene, Cumene
  Central nervous system 1,2,4-trimethyl benzene

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

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Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Cumene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL

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Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	N	NR	NR	A,C,F,N,R	N	NR	N
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	N	NR	NR	A,C,F,N,R	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.

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TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
5.1	2, 16

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Fine Putty	
Product code	29077151	Formula Date: 2014-02-13
Intended use	Putty for professional use	
Supplier	Axalta Coating Systems Canada Company 408 Fairall Street CA Ajax, ON L1S 1R6	
Manufacturer	Spies-Hecker 50 Applied Card Way, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(888) 371-3313 (855) 274-5698 (613) 996-6666 (CANUTEC)
Chemical Family	No data available.	

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Carcinogenicity	Category 2

Endpoints which are ""not classified"", ""cannot classified"" and ""not applicable"" are not shown

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer.
Precautionary statements	Contaminated work clothing should not be allowed out of the workplace. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Obtain special instructions before use. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/ vapours/ spray.

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IF exposed or concerned: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/ attention.
Specific treatment (see supplemental first aid instructions on this label).
Take off contaminated clothing and wash before reuse.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
May produce an allergic reaction.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration	GHS Hazardous
14807-96-6	Hydrous magnesium silicate	30 - 40%	
7727-43-7	Barium sulfate	20 - 30%	
No information available.	Alkyd dry resin	10 - 20%	
1330-20-7	Xylene	4 - 15%	√
13463-67-7	Titanium dioxide	2.2%	
6846-50-0	2,2,4-trimethyl-1,3-pentanediol diisobutyrate	1 - 5%	
123-86-4	Butyl acetate	1 - 4%	√
141-78-6	Ethyl acetate	1 - 4%	√
100-41-4	Ethylbenzene	1.5%	√
110-19-0	Isobutyl acetate	1 - 4%	√
67-63-0	Isopropyl alcohol	1 - 4%	√
71-36-3	N-butyl alcohol	1 - 4%	√
9004-70-0	Nitrocellulose	1 - 5%	
108-65-6	Propylene glycol monomethyl ether acetate	1 - 4%	√

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4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation , and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
14807-96-6	Hydrous magnesium silicate	ACGIH	8 hr	TWA	2 mg/m3	Respirable Dust
		Dupont	8 & 12 hour	TWA	0.5 mg/m3	Respirable Dust
7727-43-7	Barium sulfate	OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		Dupont	8 & 12 hour	TWA	10 mg/m3	Total Dust
			8 & 12 hour	TWA	5 mg/m3	Respirable Dust
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
13463-67-7	Titanium dioxide	OSHA	8 hr	TWA	15 mg/m3	Total Dust
		Dupont	8 & 12 hour	TWA	10 mg/m3	Total Dust
			8 & 12 hour	TWA	5 mg/m3	Respirable Dust
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
110-19-0	Isobutyl acetate	ACGIH	8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
108-65-6	Propylene glycol monomethyl ether acetate	Dupont	15 min	TWA	30 ppm	

** TWA = Time-weighted average.
STEL = Short term exposure limit.

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Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains.

9. Physical and chemical properties

Appearance

Form: liquid Colour: beige

Flash point	-7 - 23 °C	
Lower Explosive Limit	Not applicable.	
Upper Explosive Limit	Not applicable.	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	Not applicable.	
Solubility of Solvent In Water	moderate	
Vapor density of principal solvent (Air = 1)	0	
Approx. Boiling Range	Not applicable.	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	13.6	
Specific Gravity	1.63	
Percent Volatile By Volume	45.31%	
Percent Volatile By Weight	24.41%	
Percent Solids By Volume	54.69%	
Percent Solids By Weight	75.59%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	Not applicable.	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	>49 s	ISO 2431-1993 6 mm
VOC less exempt (g/liter)	397.9	
VOC as packaged (g/liter)	397.9	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

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Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

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Skin corrosion/irritation

Xylene	Category 2
Butyl acetate	Category 3
Ethyl acetate	Category 3
Isobutyl acetate	Category 3
N-butyl alcohol	Category 2

Serious eye damage/eye irritation

Ethyl acetate	Category 2A
Isopropyl alcohol	Category 2A
N-butyl alcohol	Category 1
Propylene glycol monomethyl ether acetate	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
No data available.

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
No data available.

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

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13. Disposal considerations

Provincial Waste Classification
Check appropriate provincial and local waste disposal regulations for proper classifications.

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

TDG

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

OCI Status:
One or more components of the mixture are not listed on the Ontario Inventory Of Chemical Substances.

Photochemical Reactivity
Photochemically reactive

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US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING! This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
14807-96-6	Hydrous magnesium silicate	N	NR	NR	C	N	NR	N
7727-43-7	Barium sulfate	N	NR	NR	,A,C,F,N,R	N	NR	N
No information available.	Alkyd dry resin	N	NR	NR	NA	N	NR	N
1330-20-7	Xylene	N	NR	NR	,A,C,F,N,R	Y	100	Y
13463-67-7	Titanium dioxide	N	NR	NR	,A,C,F,N,R	N	NR	N
6846-50-0	2,2,4-trimethyl-1,3-pentanediol diisobutyrate	N	NR	NR	,A,C,F,N,R	N	NR	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
110-19-0	Isobutyl acetate	N	NR	NR	C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	,A,C,F,N,R	N	NR	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
9004-70-0	Nitrocellulose	N	NR	NR	,A,C,F,N,R	N	100	N
108-65-6	Propylene glycol monomethyl ether acetate	N	NR	NR	F	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 1 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.

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PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Spies Hecker
The document reflects information provided to Spies Hecker by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Spies Hecker. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Spies Hecker Regulatory Affairs Consultant

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Paint Additive	
Product code	359S	Formula Date: 2008-09-26
Intended use	Intermediate	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Highly flammable liquid and vapour. May cause respiratory irritation. May cause drowsiness or dizziness.
Precautionary statements	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/ eye protection/ face protection. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ vapours/ spray. Use only outdoors or in a well-ventilated area. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local regulations.

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Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
123-86-4	Butyl acetate	48 - 59%
95-63-6	1,2,4-trimethyl benzene	8%
64742-95-6	Aromatic hydrocarbon	4 - 15%
108-67-8	1,3,5-trimethyl benzene	1 - 4%
98-82-8	Cumene	0.4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 20 - 30%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

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Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

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Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	25 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
108-67-8	1,3,5-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a

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positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear Odour: Characteristic Paint Odor

Flash point	50 °F	
Lower Explosive Limit	1.2 %	
Upper Explosive Limit	7.5 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	8.9 hPa	
Water solubility	partly miscible	
Vapor density of principal solvent (Air = 1)	4	
Approx. Boiling Range	125 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.99	
Specific Gravity	0.96	
Percent Volatile By Volume	79.73%	
Percent Volatile By Weight	74.99%	
Percent Solids By Volume	20.27%	
Percent Solids By Weight	25.01%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	415 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	6.0	
VOC* as packaged (lbs/gal)	6.0	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

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Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation
Not classified according to GHS criteria

Respiratory sensitisation
Not classified according to GHS criteria

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Skin sensitisation
not hazardous

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system 1,2,4-trimethyl benzene, Cumene

  Central nervous system 1,2,4-trimethyl benzene

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Cumene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

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International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
108-67-8	1,3,5-trimethyl benzene	N	NR	NR	NA	N	NA	N
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y

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Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
7.1	2, 15

Revision Date: 2016-01-26

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Acrylic Lacquer Thinner	
Product code	3602S	Formula Date: 2004-06-11
Intended use	Thinner for professionnal use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Toxicity for reproduction	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 3
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Harmful if swallowed.
Suspected of damaging fertility or the unborn child.
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye damage.

Precautionary statements:
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.

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IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

mixture of solvents

Components

CAS-No.	Chemical Name	Concentration
71-36-3	N-butyl alcohol	17%
67-64-1	Acetone	15 - 26%
108-88-3	Toluene	8%
763-69-9	Ethyl 3-ethoxy propionate	4 - 15%
142-82-5	Heptane	4 - 15%
67-63-0	Isopropyl alcohol	4 - 15%
67-56-1	Methyl alcohol	4%
110-12-3	Methyl isoamyl ketone	4 - 15%
8032-32-4	Vm&p naphtha	4 - 15%
95-63-6	1,2,4-trimethyl benzene	2%
64742-95-6	Aromatic hydrocarbon	1 - 4%
98-82-8	Cumene	0.1%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 1 - 5%
OSHA Hazardous: Yes

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4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
108-88-3	Toluene	OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	20 ppm	Skin
142-82-5	Heptane	ACGIH	15 min	STEL	500 ppm	
			8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	500 ppm	
67-56-1	Methyl alcohol	ACGIH	15 min	STEL	250 ppm	Skin
			8 hr	TWA	200 ppm	Skin
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	Skin
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	
8032-32-4	Vm&p naphtha	ACGIH	8 hr	TWA	300 ppm	
		Dupont	8 hr	TWA	100 ppm	
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	25 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

** TWA = Time-weighted average.
STEL = Short term exposure limit.
CEIL = Ceiling.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

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Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear Odour: Characteristic Solvent Odor

Flash point	-17 °F	
Lower Explosive Limit	0.9 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	70.3 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	83 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.64	
Specific Gravity	0.80	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	215 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	6.6	
VOC* as packaged (lbs/gal)	5.4	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

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Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

N-butyl alcohol	Category 4
Methyl alcohol	Category 3
Methyl isoamyl ketone	Category 5
1,2,4-trimethyl benzene	Category 5
Cumene	Category 5

Acute dermal toxicity
Not classified according to GHS criteria

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

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Skin corrosion/irritation

N-butyl alcohol	Category 2
Acetone	Category 3
Toluene	Category 2
Ethyl 3-ethoxy propionate	Category 3
Heptane	Category 2
Methyl isoamyl ketone	Category 3
1,2,4-trimethyl benzene	Category 2
Aromatic hydrocarbon	Category 3

Serious eye damage/eye irritation

N-butyl alcohol	Category 1
Acetone	Category 2A
Isopropyl alcohol	Category 2A
Methyl isoamyl ketone	Category 2A
1,2,4-trimethyl benzene	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Toluene Category 2

Target Organ Systemic Toxicant - Single exposure

- **Skin Absorption**

  Narcotic effects Toluene
  Eyes Methyl alcohol
  Kidney Methyl alcohol
  Liver Methyl alcohol

- **Inhalation**

  Respiratory system Isopropyl alcohol, 1,2,4-trimethyl benzene, Cumene
  Central nervous system Vm&p naphtha, Methyl alcohol, 1,2,4-trimethyl benzene
  reproductive organs Heptane

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Eyes Methyl alcohol
  Central nervous system Methyl alcohol, 1,2,4-trimethyl benzene

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Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Cumene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [heptane (mixture of isomers)]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

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Marine Pollutant:	yes [heptane (mixture of isomers)]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
763-69-9	Ethyl 3-ethoxy propionate	N	NR	NR	NA	N	NR	N
142-82-5	Heptane	N	NR	NR	A,C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
67-56-1	Methyl alcohol	N	NR	NR	A,C,F	Y	5,000	Y
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
8032-32-4	Vm&p naphtha	N	NR	NR	A,C,F	N	NR	N
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.

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RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.1	16

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Accelerator	
Product code	389S	110912
Intended use	Intermediate	
Supplier	Axalta Coating Systems Canada Company 408 Fairall Street CA Ajax, ON L1S 1R6	
Manufacturer	Axalta Coating Systems, LLC Two Commerce Square, 2001 Market Street, Suite 3600 US Philadelphia PA, 19103	
Telephone	Product information Medical emergency Transportation emergency	(800) 668-6945 (855) 274-5698 (613) 996-6666 (CANUTEC)
Chemical Family		

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
123-54-6	2,4-pentanedione	60 - 100%
77-58-7	Dibutyl tin dilaurate	0.5 - 1.5%

3. Hazards identification

Emergency Overview
DANGER! EXPOSURE MAY CAUSE LUNG INJURY AND ALLERGIC RESPIRATORY REACTION WHEN MIXED WITH ISOCYANATES. EFFECTS MAY BE PERMANENT. EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPORS AND SPRAY MIST HARMFUL IF INHALED. VAPORS MAY CAUSE FLASH FIRE. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION. CAN BE ABSORBED THROUGH THE SKIN.

Potential Health Effects
Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause skin sensitization.

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Other Potential Health Effects in addition to those listed above
2,4-pentanedione
2,4-pentanedione,a component of this product, is regulated by the U.S. EPA, under a significant new use rule. It is a violation of federal law to sell or use this product in consumer applications, including to private individuals, schools, and vocational schools. Can be absorbed through the skin in harmful amounts. Repeated exposures to high concentrations has caused adverse health effects in laboratory animals. These effects involved the central nervous system, immune system, and the red blood cell forming system. No effect was seen at 100 ppm. The odor is disagreeable at a few ppm. Repeated or prolonged skin contact may cause: skin sensitization. Skin or eye contact may cause any of the following: irritation. Overexposure of this substance may cause effects on any of the following organs/systems: central nervous system, lungs, upper respiratory system, thymus.

Note
If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice
When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

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6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F.
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation , and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-54-6	2,4-pentanedione	ACGIH	8 hr	TWA	25 ppm	Skin
		Dupont	8 & 12 hour	TWA	5 ppm	
77-58-7	Dibutyl tin dilaurate	ACGIH	15 min	STEL	0.2 mg/m3	Sn

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
			8 hr	TWA	0.1 mg/m3	Sn
		OSHA	8 hr	TWA	0.1 mg/m3	Sn

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls
Do not let product enter drains.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear Odour: Characteristic Paint Odor

Flash point	24 - 38 °C
Ignition temperature	350 °C
Lower Explosive Limit	1.7 %
Upper Explosive Limit	11.6 %
Evapouration rate	Slower than Ether
Vapor pressure of principal solvent	8.9 hPa
Solubility of Solvent In Water	appreciable
Vapor density of principal solvent (Air = 1)	3.5
Approx. Boiling Range	135 °C
Approx. Freezing Range	Not applicable.
Gallon Weight (lbs/gal)	8.14
Specific Gravity	0.98
Percent Volatile By Volume	99.06%
Percent Volatile By Weight	99.00%
Percent Solids By Volume	0.94%
Percent Solids By Weight	1.00%

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pH (waterborne systems only)	No data available.
VOC less exempt (g/liter)	966.0
VOC as packaged (g/liter)	966.0

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Toxicity Test Type	Value	Time	Species	Source
2,4-pentanedione				
Oral LD50	> 500 mg/kg		rat	Supplier MSDS
Dermal LD50	> 400 mg/kg		rat	Supplier MSDS
Inhalation LC50	5.1 ppm	4 h	rat	Supplier MSDS
Intraperitoneal LD50	750 mg/kg		mouse	RTECS
Dibutyl tin dilaurate				
Oral LD50	> 2,000 mg/kg		rat	Supplier MSDS

Key:
RTECS - Registry of Toxic Effects of Chemical Substances
CCOHS - Canadian Center for Occupational Health and Safety
Patty's - Patty's Industrial Hygiene and Toxicology, 3rd Edition

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses. Product does not contain organic linked halogens contributing to AOX.

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B10360356/

Acute toxicity aquatic invertebrates

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
77-58-7	Dibutyl tin dilaurate	Daphnia	48 h	1 mg/m3	EC50	

Acute and extended toxicity of fishes

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
123-54-6	2,4-pentanedione	Oncorhynchus mykiss (rainbow trout)	96 h	72 mg/l		
123-54-6	2,4-pentanedione	Pimephales promelas (fat-head minnow)	96 h	74 mg/l		
77-58-7	Dibutyl tin dilaurate	Leuciscus idus (Golden orfe)	48 h	2 mg/l	LC50	
77-58-7	Dibutyl tin dilaurate	Danio rerio (zebra fish)	96 h	3.1 mg/l	LC50	

Toxicity with aquatic plants

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
123-54-6	2,4-pentanedione	Daphnia	48 h	75 mg/l		

Mobility
No information available.

13. Disposal considerations

Provincial Waste Classification
Check appropriate provincial and local waste disposal regulations for proper classifications.

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

- TDG Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S. (2,4-pentanedione; Dibutyl tin dilaurate)
- Hazard class: 3 (6.1)
- UN number: 1992
- Packing group: III

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

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DSL Status
All components of the mixture are listed on the DSL.

OCI Status:
All components of the mixture are listed on the Ontario Inventory of Chemical Substances.

WHMIS Classification

- Class B Division 2
- Class D Division 2 Subdivision A 53
- Class D Division 2 Subdivision B 60

WHMIS symbols

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
123-54-6	2,4-pentanedione	N	NR	NR	A,C,F	N	NR	N
77-58-7	Dibutyl tin dilaurate	N	NR	NR	NA	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.

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OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
1.1	14

Revision Date: 2014-12-10

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B10360367

1. Identification of the substance/mixture and of the company/undertaking

Product name	Surface Cleaner	
Product code	3900S	Formula Date: 2014-03-06
Intended use	Solvent for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Toxicity for reproduction	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 3
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Suspected of damaging fertility or the unborn child.
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

mixture of solvents

Components

CAS-No.	Chemical Name	Concentration
8032-32-4	Vm&p naphtha	48 - 59%
95-63-6	1,2,4-trimethyl benzene	8%
64742-95-6	Aromatic hydrocarbon	4 - 15%
142-82-5	Heptane	4 - 15%
64742-48-9	Hydrotreated heavy naphtha (petroleum)	4 - 15%
108-67-8	1,3,5-trimethyl benzene	1 - 4%
540-84-1	2,2,4-trimethylpentane	1 - 4%
67-63-0	Isopropyl alcohol	1 - 4%
108-88-3	Toluene	1%
98-82-8	Cumene	0.4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 1 - 5%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

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Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

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Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
8032-32-4	Vm&p naphtha	ACGIH	8 hr	TWA	300 ppm	
		Dupont	8 hr	TWA	100 ppm	
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	25 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
142-82-5	Heptane	ACGIH	15 min	STEL	500 ppm	
			8 hr	TWA	400 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		OSHA	8 hr	TWA	500 ppm	
64742-48-9	Hydrotreated heavy naphtha (petroleum)	ACGIH	8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	500 ppm	
		Dupont	8 hr	TWA	100 ppm	
108-67-8	1,3,5-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
540-84-1	2,2,4-trimethylpentane	ACGIH	8 hr	TWA	300 ppm	
		OSHA	8 hr	TWA	500 ppm	
108-88-3	Toluene	OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	20 ppm	Skin
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

** TWA = Time-weighted average.
STEL = Short term exposure limit.
CEIL = Ceiling.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

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Appearance

Form: liquid Colour: clear

Flash point	41 °F	
Lower Explosive Limit	0.5 %	
Upper Explosive Limit	7 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	19.9 hPa	
Water solubility	moderate	
Vapor density of principal solvent (Air = 1)	3.8	
Approx. Boiling Range	92 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.49	
Specific Gravity	0.78	
Percent Volatile By Volume	100.00%	
Percent Volatile By Weight	100.00%	
Percent Solids By Volume	0.00%	
Percent Solids By Weight	0.00%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	215 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	6.5	
VOC* as packaged (lbs/gal)	6.5	

Does not sustain combustion.

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
Not classified according to GHS criteria

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

1,2,4-trimethyl benzene	Category 2
Aromatic hydrocarbon	Category 3
Heptane	Category 2
Hydrotreated heavy naphtha (petroleum)	Category 3
2,2,4-trimethylpentane	Category 2
Toluene	Category 2

Serious eye damage/eye irritation

1,2,4-trimethyl benzene	Category 2A
2,2,4-trimethylpentane	Category 2A
Isopropyl alcohol	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

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Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Toluene Category 2

Target Organ Systemic Toxicant - Single exposure

- **Skin Absorption**

  Narcotic effects Toluene

- **Inhalation**

  Respiratory system Isopropyl alcohol, 1,2,4-trimethyl benzene, Cumene
  Central nervous system Vm&p naphtha, 1,2,4-trimethyl benzene
  reproductive organs Heptane

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Central nervous system 1,2,4-trimethyl benzene

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Cumene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

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14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [heptane (mixture of isomers)]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [heptane (mixture of isomers)]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
8032-32-4	Vm&p naphtha	N	NR	NR	A,C,F	N	NR	N
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N

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		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
142-82-5	Heptane	N	NR	NR	A,C,F	N	NR	N
64742-48-9	Hydrotreated heavy naphtha (petroleum)	N	NR	NR	F	N	NR	N
108-67-8	1,3,5-trimethyl benzene	N	NR	NR	NA	N	NA	N
540-84-1	2,2,4-trimethylpentane	N	NR	NR	A,C,F	N	1,000	Y
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
4.1	16

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B12157384

Version	Changes

Revision Date: 2016-01-29

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B1215/3814

1. Identification of the substance/mixture and of the company/undertaking

Product name	Fed Ex White	
Product code	45P7241	Formula Date: 2015-06-10
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

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Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
2.8 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
13463-67-7	Titanium dioxide	33.8%
123-86-4	Butyl acetate	15 - 26%
103-09-3	2-ethylhexyl acetate	1 - 4%
67-64-1	Acetone	1 - 4%
141-78-6	Ethyl acetate	1 - 4%
67-63-0	Isopropyl alcohol	1 - 4%
110-43-0	Methyl amyl ketone	1 - 4%
110-12-3	Methyl isoamyl ketone	1 - 4%
108-65-6	Propylene glycol monomethyl ether acetate	1 - 4%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 30 - 40%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

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Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

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Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
13463-67-7	Titanium dioxide	OSHA	8 hr	TWA	15 mg/m3	Total Dust
		Dupont	8 & 12 hour	TWA	10 mg/m3	Total Dust
			8 & 12 hour	TWA	5 mg/m3	Respirable Dust
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	
108-65-6	Propylene glycol monomethyl ether acetate	Dupont	15 min	TWA	30 ppm	

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: white

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Flash point	38 °F	
Lower Explosive Limit	1.2 %	
Upper Explosive Limit	7.5 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	14.2 hPa	
Water solubility	moderate	
Vapor density of principal solvent (Air = 1)	4	
Approx. Boiling Range	125 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	11.13	
Specific Gravity	1.33	
Percent Volatile By Volume	53.42%	
Percent Volatile By Weight	34.51%	
Percent Solids By Volume	46.58%	
Percent Solids By Weight	65.49%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.7	
VOC* as packaged (lbs/gal)	3.5	
VOC LE (TBAC)	3.7	
VOC AP (TBAC)	3.5	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.
TBAC is not universally recognized as an exempt solvent.
Users should consult the applicable regulations for their region.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

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Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
Not classified according to GHS criteria

Acute inhalation toxicity
not hazardous

% of unknown composition 2.8 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation
Not classified according to GHS criteria

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

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Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone

  Narcotic effects Methyl amyl ketone

  Respiratory system Isopropyl alcohol, Propylene glycol monomethyl ether acetate

  reproductive organs Ethyl acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone

  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Titanium dioxide	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)	
UN number:	1263
Proper shipping name:	PAINT

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Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
13463-67-7	Titanium dioxide	N	NR	NR	A	N	NR	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
108-65-6	Propylene glycol monomethyl ether acetate	N	NR	NR	F	N	NR	N
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	N	NR	NR	A,C,F,N,R	N	NR	N

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Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard R = Reactivity Hazard C = Chronic Hazard P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Black	
Product code	45PN0001	Formula Date: 2014-05-14
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
14 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
123-86-4	Butyl acetate	15 - 26%
67-64-1	Acetone	4 - 15%
110-43-0	Methyl amyl ketone	4 - 15%
103-09-3	2-ethylhexyl acetate	1 - 4%
1333-86-4	Carbon black	1.7%
141-78-6	Ethyl acetate	1 - 4%
67-63-0	Isopropyl alcohol	1 - 4%
78-93-3	Methyl ethyl ketone	1 - 4%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	0.0 - 1.0%
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

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Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		OSHA	8 hr	TWA	150 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
1333-86-4	Carbon black	ACGIH	8 hr	TWA	3 mg/m3	
		OSHA	8 hr	TWA	3.5 mg/m3	
		Dupont	8 & 12 hour	TWA	0.5 mg/m3	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
78-93-3	Methyl ethyl ketone	ACGIH	8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

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Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: black

Flash point	19 °F	
Lower Explosive Limit	1.1 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	26.1 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	4	
Approx. Boiling Range	125 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.18	
Specific Gravity	0.98	
Percent Volatile By Volume	53.90%	
Percent Volatile By Weight	46.43%	
Percent Solids By Volume	46.10%	
Percent Solids By Weight	53.57%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.5	
VOC* as packaged (lbs/gal)	3.2	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

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Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
Not classified according to GHS criteria

Acute inhalation toxicity
not hazardous

% of unknown composition 14 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Acetone	Category 2A
2-ethylhexyl acetate	Category 2B
Ethyl acetate	Category 2A
Isopropyl alcohol	Category 2A
Methyl ethyl ketone	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Category 1
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	Category 1

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Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Respiratory system Isopropyl alcohol
  reproductive organs Ethyl acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Carbon black IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses. The product contains an organic linked halogen. It may contribute to the AOX-value.

13. Disposal considerations

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Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

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CAS #	Ingredient	EPCRA 302	EPCRA TPQ	EPCRA RQ	EPCRA 311/312	EPCRA 313	CERCLA RQ(lbs)	CAA HAP
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
1333-86-4	Carbon black	N	NR	NR	C	N	NR	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	N	NR	NR	A,C,F,N,R	N	NR	N
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	N	NR	NR	A,C,F,N,R	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs

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Report version

Version	Changes
4.0	2, 8, 11, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Binder	
Product code	7899E	Formula Date: 2015-07-14
Intended use	Intermediate	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Highly flammable liquid and vapour. May cause drowsiness or dizziness. May cause an allergic skin reaction. Causes skin irritation. Causes serious eye irritation.
Precautionary statements	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ vapours/ spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label).

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If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
141-78-6	Ethyl acetate	15 - 26%
110-43-0	Methyl amyl ketone	15 - 26%
103-09-3	2-ethylhexyl acetate	4 - 15%
123-86-4	Butyl acetate	4 - 15%
67-63-0	Isopropyl alcohol	4 - 15%
67-64-1	Acetone	1 - 4%
78-93-3	Methyl ethyl ketone	1 - 4%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	0.0 - 1.0%
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 30 - 40%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

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Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
78-93-3	Methyl ethyl ketone	ACGIH	8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

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Appearance

Form: liquid Colour: cloudy

Flash point	28 °F	
Lower Explosive Limit	1.1 %	
Upper Explosive Limit	12 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	28.0 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	3	
Approx. Boiling Range	70 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.78	
Specific Gravity	0.93	
Percent Volatile By Volume	75.48%	
Percent Volatile By Weight	68.69%	
Percent Solids By Volume	24.52%	
Percent Solids By Weight	31.31%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	5.3	
VOC* as packaged (lbs/gal)	5.2	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

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Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

Ethyl acetate	Category 3
2-ethylhexyl acetate	Category 2
Butyl acetate	Category 3
Acetone	Category 3
Methyl ethyl ketone	Category 3

Serious eye damage/eye irritation

Ethyl acetate	Category 2A
2-ethylhexyl acetate	Category 2B
Isopropyl alcohol	Category 2A
Acetone	Category 2A
Methyl ethyl ketone	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Category 1
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	Category 1

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Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Respiratory system Isopropyl alcohol
  reproductive organs Ethyl acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

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14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N

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CAS #	Ingredient	EPCRA 302	EPCRA TPQ	EPCRA RQ	EPCRA 311/312	EPCRA 313	CERCLA RQ(lbs)	CAA HAP
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	N	NR	NR	A,C,F,N,R	N	NR	N
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	N	NR	NR	A,C,F,N,R	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2, 8, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Epoxy Primer - Gray	
Product code	825P30018	Formula Date: 2015-08-31
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitisation	Category 1
Toxicity for reproduction	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Suspected of damaging fertility or the unborn child.
Highly flammable liquid and vapour.
May cause an allergic skin reaction.
Causes skin irritation.
Causes serious eye damage.

Precautionary statements:
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF exposed or concerned: Get medical advice/ attention.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).

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If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
Immediately call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store locked up.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
13463-67-7	Titanium dioxide	9.3%
95-63-6	1,2,4-trimethyl benzene	4%
67-64-1	Acetone	4 - 15%
64742-95-6	Aromatic hydrocarbon	4 - 15%
25036-25-3	Bisphenol a/epichlorohydrin poly mn 700 - 1200 g/mol	4 - 15%
25068-38-6	Bisphenol-epichlorohydrin type polymer	4 - 15%
110-12-3	Methyl isoamyl ketone	4 - 15%
71-36-3	N-butyl alcohol	4%
1330-20-7	Xylene	2%
7779-90-0	Zinc phosphate	2%
64742-94-5	Aromatic hydrocarbon	1 - 4%
13983-17-0	Wollastonite	1 - 4%
100-41-4	Ethylbenzene	0.4%
98-82-8	Cumene	0.2%
69-72-7	Salicylic acid	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 40 - 50%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

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4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
13463-67-7	Titanium dioxide	OSHA	8 hr	TWA	15 mg/m3	Total Dust
		Dupont	8 & 12 hour	TWA	10 mg/m3	Total Dust
			8 & 12 hour	TWA	5 mg/m3	Respirable Dust
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		OSHA	8 hr	TWA	25 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
25036-25-3	Bisphenol a/epichlorohydrin poly mn 700 - 1200 g/mol	ACGIH	8 hr	TWA	10 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust
		OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
7779-90-0	Zinc phosphate	OSHA	8 hr	TWA	5 mg/m3	Respirable Dust
64742-94-5	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	100 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
69-72-7	Salicylic acid	OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: grey

Flash point	33 °F
Lower Explosive Limit	0.9 %
Upper Explosive Limit	8.2 %
Evapouration rate	Slower than Ether
Vapor pressure of principal solvent	14.4 hPa
Water solubility	moderate
Vapor density of principal solvent (Air = 1)	4.1
Approx. Boiling Range	56 °C
Approx. Freezing Range	Not applicable.
Gallon Weight (lbs/gal)	11.8
Specific Gravity	1.41
Percent Volatile By Volume	53.87%
Percent Volatile By Weight	32.01%
Percent Solids By Volume	46.14%
Percent Solids By Weight	67.99%
pH (waterborne systems only)	not applicable
Partition coefficient: n-octanol/water	no data available

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Ignition temperature	301 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.5	
VOC* as packaged (lbs/gal)	3.2	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

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Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

1,2,4-trimethyl benzene	Category 2
Acetone	Category 3
Aromatic hydrocarbon	Category 3
Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	Category 2
Bisphenol-epichlorohydrin type polymer	Category 2
Methyl isoamyl ketone	Category 3
N-butyl alcohol	Category 2
Xylene	Category 2
Aromatic hydrocarbon	Category 3
Wollastonite	Category 3

Serious eye damage/eye irritation

1,2,4-trimethyl benzene	Category 2A
Acetone	Category 2A
Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	Category 2A
Bisphenol-epichlorohydrin type polymer	Category 2A
Methyl isoamyl ketone	Category 2A
N-butyl alcohol	Category 1
Xylene	Category 2A
Wollastonite	Category 2B
Salicylic acid	Category 1

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	Category 1
Bisphenol-epichlorohydrin type polymer	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Salicylic acid	Category 2

Target Organ Systemic Toxicant - Single exposure
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

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Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. Low molecular epoxy constituents are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Avoid skin and eye contact. Avoid inhalation of vapour or mist.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Titanium dioxide	IARC 2B
Ethylbenzene	IARC 2B
Cumene	IARC 2B
Titanium dioxide	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [epoxy resin (number average molecular weight <= 700)]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

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H129535538

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [epoxy resin (number average molecular weight <= 700)]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
13463-67-7	Titanium dioxide	N	NR	NR	A	N	NR	N
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
25036-25-3	Bisphenol a/epichlorohydrin poly mn 700 -1200 g/mol	N	NR	NR	C	N	NR	N
25068-38-6	Bisphenol-epichlorohydrin type polymer	N	NR	NR	A,C,F,N,R	N	NR	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
7779-90-0	Zinc phosphate	N	NR	NR	A,C,F,N,R	Y	NR	N
64742-94-5	Aromatic hydrocarbon	N	NR	NR	A	N	NR	N
13983-17-0	Wollastonite	N	NR	NR	A,C,F,N,R	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y
69-72-7	Salicylic acid	N	NR	NR	A,C,F,N,R	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard

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B12953538

	R = Reactivity Hazard C = Chronic Hazard P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
4.0	2, 11, 15

Revision Date: 2016-01-29

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B12953538

1. Identification of the substance/mixture and of the company/undertaking

Product name	Low Gloss Black	
Product code	848PN5636LG	Formula Date: 2015-02-13
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Toxicity for reproduction	Category 1B
Target Organ Systemic Toxicant - Single exposure	Category 3
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
May damage fertility or the unborn child.
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.

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Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
98-56-6	4-chlorobenzotrifluoride	4 - 15%
67-64-1	Acetone	4 - 15%
123-86-4	Butyl acetate	4 - 15%
110-43-0	Methyl amyl ketone	4 - 15%
108-88-3	Toluene	2%
1330-20-7	Xylene	2%
123-54-6	2,4-pentanedione	1 - 4%
103-09-3	2-ethylhexyl acetate	1 - 4%
64742-95-6	Aromatic hydrocarbon	1 - 4%
141-78-6	Ethyl acetate	1 - 4%
628-63-7	Primary amyl acetate	1 - 4%
1333-86-4	Carbon black	1.0%
100-41-4	Ethylbenzene	0.5%
13463-67-7	Titanium dioxide	0.4%
1067-33-0	Dibutyltin diacetate	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes
* Assigned CAS No. - An official CAS No. does not exist. The CAS No. shown is for a similar chemical.

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4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

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6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.
During baking at temperatures above 400°C, small amounts of hydrogen fluoride can be evolved; these amounts increase as temperatures increase. Hydrogen fluoride vapours are very toxic and cause skin and eye irritation. Above 430°C an explosive reaction may occur if finely divided fluorocarbon comes into contact with metal powder (aluminium or magnesium). Operations such as grinding, buffing or grit blasting may generate such mixtures. Avoid any dust buildup with fluorocarbons and metal mixtures.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
98-56-6	4-chlorobenzotrifluoride	Dupont	8 & 12 hour	TWA	20 ppm	
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
108-88-3	Toluene	OSHA		CEIL	300 ppm	
			10 min	TWA	500 ppm	
			8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	20 ppm	Skin
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
123-54-6	2,4-pentanedione	ACGIH	8 hr	TWA	25 ppm	Skin
		Dupont	8 & 12 hour	TWA	5 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
628-63-7	Primary amyl acetate	ACGIH	15 min	STEL	100 ppm	
			8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
1333-86-4	Carbon black	ACGIH	8 hr	TWA	3 mg/m3	
		OSHA	8 hr	TWA	3.5 mg/m3	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		Dupont	8 & 12 hour	TWA	0.5 mg/m3	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
13463-67-7	Titanium dioxide	OSHA	8 hr	TWA	15 mg/m3	Total Dust
		Dupont	8 & 12 hour	TWA	10 mg/m3	Total Dust
			8 & 12 hour	TWA	5 mg/m3	Respirable Dust
1067-33-0	Dibutyltin diacetate	ACGIH	8 hr	TWA	0.1 mg/m3	Skin Sn
		OSHA	8 hr	TWA	0.1 mg/m3	Skin Sn

** TWA = Time-weighted average.
STEL = Short term exposure limit.
CEIL = Ceiling.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

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Appearance

Form: liquid Colour: black

Flash point	24 °F	
Lower Explosive Limit	0.9 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	36.2 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	125 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.88	
Specific Gravity	1.06	
Percent Volatile By Volume	59.83%	
Percent Volatile By Weight	50.38%	
Percent Solids By Volume	40.17%	
Percent Solids By Weight	49.62%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	268 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.4	
VOC* as packaged (lbs/gal)	2.7	
VOC LE (TBAC)	3.4	
VOC AP (TBAC)	2.7	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.
TBAC is not universally recognized as an exempt solvent.
Users should consult the applicable regulations for their region.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
In the event of fire Carbon monoxide, fluorinated hydrocarbons, hydrogen fluoride, nitrogen oxides may be formed.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

4-chlorobenzotrifluoride	Category 2
Acetone	Category 3
Butyl acetate	Category 3
Toluene	Category 2
Xylene	Category 2
2-ethylhexyl acetate	Category 2
Aromatic hydrocarbon	Category 3
Ethyl acetate	Category 3
Primary amyl acetate	Category 3
Dibutyltin diacetate	Category 1B

Serious eye damage/eye irritation

4-chlorobenzotrifluoride	Category 2A
Acetone	Category 2A
Xylene	Category 2A
2-ethylhexyl acetate	Category 2B
Ethyl acetate	Category 2A
Dibutyltin diacetate	Category 2A

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Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Toluene	Category 2
Dibutyltin diacetate	Category 1B

Target Organ Systemic Toxicant - Single exposure

- **Skin Absorption**

  Narcotic effects Toluene

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Central nervous system 2,4-pentanedione
  reproductive organs Ethyl acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Body weight effects Ethyl acetate
  Liver Dibutyltin diacetate
  Central nervous system 2,4-pentanedione

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

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Whether the hazardous chemical is listed by NTP, IARC or OSHA

Carbon black	IARC 2B
Ethylbenzene	IARC 2B
Titanium dioxide	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [4-chloro-a,a,a-trifluorotoluene]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	yes [4-chloro-a,a,a-trifluorotoluene]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

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TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
98-56-6	4-chlorobenzotrifluoride	N	NR	NR	C,F,P	N	NR	N
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
123-54-6	2,4-pentanedione	N	NR	NR	A,C,F	N	NR	N
103-09-3	2-ethylhexyl acetate	N	NR	NR	A,F	N	NR	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
628-63-7	Primary amyl acetate	N	NR	NR	A,C	N	5,000	N
1333-86-4	Carbon black	N	NR	NR	C	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
13463-67-7	Titanium dioxide	N	NR	NR	A	N	NR	N
1067-33-0	Dibutyltin diacetate	N	NR	NR	A,C	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 1

Glossary of Terms:

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ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
5.0	2, 8, 11, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Fast Accelerator	
Product code	8989S	Formula Date: 2013-12-31
Intended use	Intermediate	
Supplier	Axalta Coating Systems Canada Company 408 Fairall Street CA Ajax, ON L1S 1R6	
Manufacturer	Axalta Coating Systems, LLC Two Commerce Square, 2001 Market Street, Suite 3600 US Philadelphia PA, 19103	
Telephone	Product information Medical emergency Transportation emergency	(800) 668-6945 (855) 274-5698 (613) 996-6666 (CANUTEC)

Chemical Family

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 3
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 3
Acute inhalation toxicity	Category 3
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitisation	Category 1
Germ cell mutagenicity	Category 2
Toxicity for reproduction	Category 1B
Target Organ Systemic Toxicant - Single exposure	Category 1
Target Organ Systemic Toxicant - Repeated exposure	Category 1

Endpoints which are ""not classified"", ""cannot classified"" and ""not applicable"" are not shown

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Flammable liquid and vapour.
Harmful if swallowed.
Toxic in contact with skin.
Toxic if inhaled.
Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
May damage fertility or the unborn child.
Causes damage to organs.

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	Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust or mist. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Do not eat, drink or smoke when using this product. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Obtain special instructions before use. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. If skin irritation or rash occurs: Get medical advice/ attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Specific treatment (see supplemental first aid instructions on this label). Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
None known.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration	GHS Hazardous
123-54-6	2,4-pentanedione	92 - 100%	√
77-58-7	Dibutyl tin dilaurate	4 - 15%	√

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a

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physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation , and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-54-6	2,4-pentanedione	ACGIH	8 hr	TWA	25 ppm	Skin
		Dupont	8 & 12 hour	TWA	5 ppm	
77-58-7	Dibutyl tin dilaurate	ACGIH	15 min	STEL	0.2 mg/m3	Sn
			8 hr	TWA	0.1 mg/m3	Sn
		OSHA	8 hr	TWA	0.1 mg/m3	Sn

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined

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spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains.

9. Physical and chemical properties

Appearance

Form: liquid Colour: clear Odour: Characteristic Paint Odor

Flash point	24 - 38 °C	
Lower Explosive Limit	1.7 %	
Upper Explosive Limit	11.6 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	8.6 hPa	
Solubility of Solvent In Water	appreciable	
Vapor density of principal solvent (Air = 1)	3.5	
Approx. Boiling Range	135 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.16	
Specific Gravity	0.98	
Percent Volatile By Volume	95.32%	
Percent Volatile By Weight	95.00%	
Percent Solids By Volume	4.68%	
Percent Solids By Weight	5.00%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	350 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC less exempt (g/liter)	929.6	
VOC as packaged (g/liter)	929.6	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

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Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

2,4-pentanedione	Category 4

Acute dermal toxicity

2,4-pentanedione	Category 3

Acute inhalation toxicity

2,4-pentanedione	Category 3

% of unknown composition 0 %

Skin corrosion/irritation

Dibutyl tin dilaurate	Category 1B

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Serious eye damage/eye irritation

Dibutyl tin dilaurate	Category 1

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Dibutyl tin dilaurate	Category 1

Germ cell mutagenicity

Dibutyl tin dilaurate	Category 2

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction

Dibutyl tin dilaurate	Category 1B

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Central nervous system 2,4-pentanedione

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Central nervous system 2,4-pentanedione

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

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13. Disposal considerations

Provincial Waste Classification
Check appropriate provincial and local waste disposal regulations for proper classifications.

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III
Marine Pollutant:	yes [dibutylbis((1-oxododecyl)oxy)stannane]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III

TDG

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

OCI Status:
All components of the mixture are listed on the Ontario Inventory of Chemical Substances.

Photochemical Reactivity
Non-photochemically reactive

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Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311 - 312	313	RQ(lbs)	HAP
123-54-6	2,4-pentanedione	N	NR	NR	A,C,F	N	NR	N
77-58-7	Dibutyl tin dilaurate	N	NR	NR	,A,C,F,N,R	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
1.0	

Revision Date: 2015-05-07

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Activator - Fast	
Product code	936S	Formula Date: 2015-01-27
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes skin irritation.
Causes serious eye damage.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
Immediately call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
67-64-1	Acetone	26 - 37%
71-36-3	N-butyl alcohol	13%
110-12-3	Methyl isoamyl ketone	4 - 15%
1330-20-7	Xylene	4%
79-20-9	Methyl acetate	1 - 4%
100-41-4	Ethylbenzene	0.9%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 30 - 40%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: amber

Flash point	8 °F

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Lower Explosive Limit	1 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	95.7 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	117 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.28	
Specific Gravity	0.87	
Percent Volatile By Volume	66.86%	
Percent Volatile By Weight	61.75%	
Percent Solids By Volume	33.14%	
Percent Solids By Weight	38.25%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	340 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	2.9	
VOC* as packaged (lbs/gal)	1.7	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

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Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
Not classified according to GHS criteria

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

Acetone	Category 3
N-butyl alcohol	Category 2
Methyl isoamyl ketone	Category 3
Xylene	Category 2
Methyl acetate	Category 3

Serious eye damage/eye irritation

Acetone	Category 2A
N-butyl alcohol	Category 1
Methyl isoamyl ketone	Category 2A
Xylene	Category 2A
Methyl acetate	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

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B12/9146/

Respiratory system Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Ethylbenzene IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

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DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
Product is not DSL listed because one or more ingredients are not on the DSL inventory.

Photochemical Reactivity
Non-photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.

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B12/9146/

RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
6.0	2, 11, 15

Revision Date: 2016-01-26

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Activator - Slow	
Product code	937S	Formula Date: 2015-08-05
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye damage.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.

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Take off contaminated clothing and wash before reuse.
Immediately call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
71-36-3	N-butyl alcohol	26%
1330-20-7	Xylene	7%
110-12-3	Methyl isoamyl ketone	4 - 15%
100-41-4	Ethylbenzene	1.8%
79-20-9	Methyl acetate	1 - 4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	

** TWA = Time-weighted average.
STEL = Short term exposure limit.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: amber

Flash point	69 °F
Lower Explosive Limit	1 %
Upper Explosive Limit	11.2 %
Evapouration rate	Slower than Ether
Vapor pressure of principal solvent	6.8 hPa
Water solubility	moderate
Vapor density of principal solvent (Air = 1)	2.6
Approx. Boiling Range	117 °C
Approx. Freezing Range	Not applicable.
Gallon Weight (lbs/gal)	7.64
Specific Gravity	0.92

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Percent Volatile By Volume	50.11%	
Percent Volatile By Weight	45.18%	
Percent Solids By Volume	49.89%	
Percent Solids By Weight	54.83%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	340 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.4	
VOC* as packaged (lbs/gal)	3.3	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

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Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
Not classified according to GHS criteria

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

N-butyl alcohol	Category 2
Xylene	Category 2
Methyl isoamyl ketone	Category 3
Methyl acetate	Category 3

Serious eye damage/eye irritation

N-butyl alcohol	Category 1
Xylene	Category 2A
Methyl isoamyl ketone	Category 2A
Methyl acetate	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
No data available.

Aspiration toxicity
Not classified according to GHS criteria

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Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Ethylbenzene	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

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Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
Product is not DSL listed because one or more ingredients are not on the DSL inventory.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 0

Glossary of Terms:

ACGIH | American Conference of Governmental Industrial Hygienists.

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IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

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The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
8.0	2, 11, 15

Revision Date: 2016-01-26

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B13158366

1. Identification of the substance/mixture and of the company/undertaking

Product name	Activator - Extra Slow	
Product code	938S	Formula Date: 2015-01-22
Intended use	Hardener for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Suspected of causing cancer.
Flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes skin irritation.
Causes serious eye damage.

Precautionary statements:
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/ attention.

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Take off contaminated clothing and wash before reuse.
Immediately call a POISON CENTER or doctor/ physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
64742-94-5	Aromatic hydrocarbon	15 - 26%
71-36-3	N-butyl alcohol	13%
110-12-3	Methyl isoamyl ketone	4 - 15%
1330-20-7	Xylene	4%
79-20-9	Methyl acetate	1 - 4%
91-20-3	Naphthalene	1.2%
100-41-4	Ethylbenzene	0.9%
98-82-8	Cumene	0.4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a

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physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
64742-94-5	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	100 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
91-20-3	Naphthalene	ACGIH		CEIL	15 ppm	Skin
			8 hr	TWA	10 ppm	Skin
		OSHA	8 hr	TWA	10 ppm	
		Dupont	8 & 12 hour	TWA	0.1 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	
98-82-8	Cumene	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin

** TWA = Time-weighted average.
STEL = Short term exposure limit.
CEIL = Ceiling.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

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Appearance

Form: liquid Colour: amber

Flash point	77 °F	
Lower Explosive Limit	0.6 %	
Upper Explosive Limit	11.2 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	6.0 hPa	
Water solubility	moderate	
Vapor density of principal solvent (Air = 1)	4.8	
Approx. Boiling Range	117 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.75	
Specific Gravity	0.93	
Percent Volatile By Volume	49.43%	
Percent Volatile By Weight	45.21%	
Percent Solids By Volume	50.57%	
Percent Solids By Weight	54.79%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	340 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.4	
VOC* as packaged (lbs/gal)	3.4	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

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Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
Not classified according to GHS criteria

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation

Aromatic hydrocarbon	Category 3
N-butyl alcohol	Category 2
Methyl isoamyl ketone	Category 3
Xylene	Category 2
Methyl acetate	Category 3

Serious eye damage/eye irritation

N-butyl alcohol	Category 1
Methyl isoamyl ketone	Category 2A
Xylene	Category 2A
Methyl acetate	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation
Not classified according to GHS criteria

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity

Naphthalene	Category 2

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Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system Cumene, Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Naphthalene	IARC 2B
Naphthalene	NTP Anticipated
Ethylbenzene	IARC 2B
Cumene	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III

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Marine Pollutant:	yes [Solvent naphtha (petroleum), heavy arom.]

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III
Marine Pollutant:	yes [Solvent naphtha (petroleum), heavy arom.]
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
Product is not DSL listed because one or more ingredients are not on the DSL inventory.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the State of California to cause cancer.

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
64742-94-5	Aromatic hydrocarbon	N	NR	NR	A	N	NR	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
91-20-3	Naphthalene	N	NR	NR	A,C,F	Y	100	Y
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
98-82-8	Cumene	N	NR	NR	A,C,F	Y	NR	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances

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311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard	A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.	
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.	
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.	
TPQ	Threshold Planning Quantity.	
RQ	Reportable Quantity	
NA	not available	
NR	not regulated	

16. Other information

HMIS rating H: 3 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
5.0	2, 11, 15

Revision Date: 2016-01-26

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1. Identification of the substance/mixture and of the company/undertaking

Product name	Activator - Fast	
Product code	946S	Formula Date: 2015-10-19
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Danger

Hazard statements:
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
May cause an allergic skin reaction.
Causes serious eye damage.

Precautionary statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ vapours/ spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.
Immediately call a POISON CENTER or doctor/ physician.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins and solvents

Components

CAS-No.	Chemical Name	Concentration
67-63-0	Isopropyl alcohol	15 - 26%
90-72-2	2,4,6- tri((dimethylamino)methyl) phenol	4 - 15%
79-20-9	Methyl acetate	4 - 15%
110-12-3	Methyl isoamyl ketone	4 - 15%
1760-24-3	N-beta-(aminoethyl)-gamma-aminopropyltrimethoxysilane	1 - 4%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

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Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling

Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion

Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
110-12-3	Methyl isoamyl ketone	ACGIH	8 hr	TWA	20 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

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Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: liquid Colour: amber

Flash point	33 °F	
Lower Explosive Limit	1 %	
Upper Explosive Limit	16 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	35.3 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2.1	
Approx. Boiling Range	55 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	7.76	
Specific Gravity	0.93	
Percent Volatile By Volume	43.31%	
Percent Volatile By Weight	38.69%	
Percent Solids By Volume	56.69%	
Percent Solids By Weight	61.31%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	399 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	2.4	
VOC* as packaged (lbs/gal)	2.1	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

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Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Isopropyl alcohol	Category 2A
2,4,6- tri((dimethylamino)methyl) phenol	Category 2A
Methyl acetate	Category 2A
Methyl isoamyl ketone	Category 2A
N-beta-(aminoethyl)-gamma-aminopropyltrimethoxysilane	Category 1

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Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

N-beta-(aminoethyl)-gamma-aminopropyltrimethoxysilane	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  Respiratory system N-beta-(aminoethyl)-gamma-aminopropyltrimethoxysilane, Isopropyl alcohol, Methyl acetate

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

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14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
Product is not DSL listed because one or more ingredients are not on the DSL inventory.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
90-72-2	2,4,6-tri((dimethylamino)methyl) phenol	N	NR	NR	A,C,F,N,R	N	NR	N
79-20-9	Methyl acetate	N	NR	NR	A,C,F,N,R	N	100	N
110-12-3	Methyl isoamyl ketone	N	NR	NR	C	N	NR	N

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		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
1760-24-3	N-beta-(aminoethyl)-gamma-aminopropyltrimethoxysilane	N	NR	NR	A,C	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 3 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
3.0	2, 11, 15

Revision Date: 2016-01-29

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1. Identification of the substance/mixture and of the company/undertaking

Product name	1K SELF ETCHING GREEN AEROSOL PRIMER	
Product code	A-4115S	140319
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Card Way Suite 300 US Glen Mills PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(800) 438-3876 (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Serious eye damage/eye irritation	Category 1
Skin sensitisation	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B

Endpoints which are ""not classified"", ""cannot classified"" and ""not applicable"" are not shown

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Causes serious eye damage. May cause an allergic skin reaction. May cause genetic defects. May cause cancer.
Precautionary statements	Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/ vapours/ spray. IF exposed or concerned: Get medical advice/ attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Immediately call a POISON CENTER or doctor/ physician. Specific treatment (see supplemental first aid instructions on this label). Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container to .?.

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Other hazards which do not result in classification
Contains epoxy constituents. See information supplied by the manufacturer. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
67-64-1	Acetone	
71-36-3	N-butyl alcohol	9%
123-86-4	Butyl acetate	
141-78-6	Ethyl acetate	
68476-85-7	Liquified compressed gas	
79-20-9	Methyl acetate	
108-65-6	Propylene glycol monomethyl ether acetate	
108-10-1	Methyl isobutyl ketone	2.4%
1330-20-7	Xylene	2%
25068-38-6	Epoxy resin	
78-93-3	Methyl ethyl ketone	
7779-90-0	Zinc phosphate	1%
100-41-4	Ethylbenzene	0.5%

Non-regulated ingredients 5 - 10%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

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Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

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Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F.
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. CONTENTS UNDER PRESSURE. Clean nozzle and cap container after each use. Do not puncture or incinerate (burn) container. Exposure to heat or prolonged exposure to sun may cause bursting. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 & 12 hour	TWA	25 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
68476-85-7	Liquified compressed gas	ACGIH	8 hr	TWA	1,000 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
79-20-9	Methyl acetate	ACGIH	15 min	STEL	250 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
108-65-6	Propylene glycol monomethyl ether acetate	Dupont	15 min	TWA	30 ppm	
108-10-1	Methyl isobutyl ketone	ACGIH	15 min	STEL	75 ppm	
			8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
78-93-3	Methyl ethyl ketone	ACGIH	15 min	STEL	300 ppm	
			8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
		Dupont	15 min	TWA	300 ppm	
			8 & 12 hour	TWA	200 ppm	
7779-90-0	Zinc phosphate	OSHA	8 hr	TWA	5 mg/m3	Respirable Dust
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

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Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

9. Physical and chemical properties

Appearance

Form: aerosol Colour: green

Flash point	< 20 °F	
Ignition temperature	272 °C	
Lower Explosive Limit	1.5 %	
Upper Explosive Limit	16 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	283.5 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	56 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	6.72	
Specific Gravity	0.82	
Percent Volatile By Volume	95.81%	
Percent Volatile By Weight	88.15%	
Percent Solids By Volume	4.19%	
Percent Solids By Weight	10.59%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	272 °C	DIN 51794
Decomposition temperature		
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	5.6	
VOC* as packaged (lbs/gal)	3.4	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

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Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

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Serious eye damage/eye irritation

acetone	Category 2A
n-butanol	Category 1
ethyl acetate	Category 2A
methyl acetate	Category 1
2-methoxy-1-methylethyl acetate	Category 2A
4-methylpentan-2-one	Category 2A
xylene	Category 2A
epoxy resin (number average molecular weight 700 <= 1200)	Category 2A
butanone	Category 2A
ethylbenzene	Category 2B

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

epoxy resin (number average molecular weight 700 <= 1200)	Category 1

Germ cell mutagenicity

propane	Category 1B

Carcinogenicity

propane	Category 1A

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. Low molecular epoxy constituents are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Avoid skin and eye contact. Avoid inhalation of vapour or mist.

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Whether the hazardous chemical is listed by NTP, IARC or OSHA

4-methylpentan-2-one	IARC 2B
Titanium dioxide	IARC 2B
ethylbenzene	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

Acute toxicity aquatic invertebrates

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
67-64-1	Acetone	Daphnia	2 days	10 mg/l		
123-86-4	Butyl acetate	Ceriodaphnia dubia	2 days	72.8 mg/l	EC50	
108-10-1	Methyl isobutyl ketone	Daphnia	1 days	1,550 mg/l		
1330-20-7	Xylene	Water flea	1 days	10 mg/l	EC50	
1330-20-7	Xylene	Daphnia	1 days	10 mg/l	EC50	
78-93-3	Methyl ethyl ketone	Daphnia	48 h	5,091 mg/l	EC50	
7779-90-0	Zinc phosphate	Daphnia	48 h	1 mg/l	EC50	
21645-51-2	Aluminum hydroxide	Daphnia	0	10,000 mg/l	EC50	
68611-44-9	Amorphous silica-fumed	Daphnia	24 h	10,000 mg/l	EC50	
20344-49-4	Iron hydroxide	Daphnia magna (Water flea)	0	10,000 mg/l	EC50	
67-63-0	Isopropyl alcohol	Daphnia	2 days	7,550 mg/l		
9004-70-0	Nitrocellulose	Daphnia	48 h	10,000 mg/l		
71-43-2	Benzene	Daphnia	48 h	9.2 mg/l	EC50	
1333-86-4	Carbon black	Water flea	1 days	5,600 mg/l	EC50	
100-41-4	Ethylbenzene	Daphnia	48 h	1.8 mg/l	EC50	
108-32-7	Propylene carbonate	Daphnia	48 h	500 mg/l	EC50	
75-56-9	Propylene oxide	Daphnia	48 h	350 mg/l	EC50	
108-88-3	Toluene	Water flea	1 day	100 ppm		
1314-13-2	Zinc oxide	Daphnia	48 h	1,000 mg/l	EC50	

Acute and extended toxicity of fishes

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
67-64-1	Acetone	Carassius auratus (goldfish)	1 day	5,000 mg/l		
67-64-1	Acetone	Oncorhynchus mykiss (rainbow trout)	4 days	5,540 mg/l		
67-64-1	Acetone	Lepomis macrochirus (Bluegill sunfish)	4 days	8,300 mg/l		
79-20-9	Methyl acetate	Pimephales promelas (fathead minnow)	4 days	320 mg/l		

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CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
71-36-3	N-butyl alcohol	Carassius auratus (goldfish)	1 day	1,000 mg/kg		
71-36-3	N-butyl alcohol	Leuciscus idus (Golden orfe)	2 days	1,770 mg/kg		
123-86-4	Butyl acetate	Pimephales promelas (fathead minnow)	4 days	18 mg/l	LC50	
123-86-4	Butyl acetate	Lepomis macrochirus (Bluegill sunfish)	4 days	100 mg/l		
108-10-1	Methyl isobutyl ketone	Carassius auratus (goldfish)	1 days	460 mg/l	LC50	
108-10-1	Methyl isobutyl ketone	Pimephales promelas (fathead minnow)	4 days	505 ppm	LC50	
108-10-1	Methyl isobutyl ketone	Leuciscus idus (Golden orfe)	2 days	672 mg/l	LC50	
13463-67-7	Titanium dioxide	Pimephales promelas (fathead minnow)	4 days	1,000 mg/l		
1330-20-7	Xylene	Pimephales promelas (fathead minnow)	4 days	21 mg/l	EC50	
1330-20-7	Xylene	Lepomis macrochirus (Bluegill sunfish)	4 days	22 mg/l	EC50	
1330-20-7	Xylene	Carassius auratus (goldfish)	4 days	24 mg/l	EC50	
141-78-6	Ethyl acetate	Pimephales promelas (fathead minnow)	4 days	230 mg/l		
141-78-6	Ethyl acetate	Leuciscus idus (Golden orfe)	2 days	270 mg/l		
141-78-6	Ethyl acetate	Oncorhynchus mykiss (rainbow trout)	4 days	425 mg/l		
78-93-3	Methyl ethyl ketone	Pimephales promelas (fathead minnow)	0	3,220 mg/l	LC50	
108-65-6	Propylene glycol monomethyl ether acetate	Pimephales promelas (fathead minnow)	4 days	161 mg/l		
7779-90-0	Zinc phosphate	Oncorhynchus mykiss (rainbow trout)	96 h	1 mg/l	LC50	
68611-44-9	Amorphous silica-fumed	Cyprinodon variegatus (sheepshead minnow)	96 h	10,000 mg/l	LC50	
20344-49-4	Iron hydroxide	Leuciscus idus (Golden orfe)	48 h	1,000 mg/l	EC50	
67-63-0	Isopropyl alcohol	Pimephales promelas (fathead minnow)	0	83 mg/l		
9004-70-0	Nitrocellulose	Pimephales promelas (fathead minnow)	4 days	1,000 mg/l		
9004-70-0	Nitrocellulose	Danio rerio (zebra fish)	96 h	5,001 mg/l		
7664-38-2	Phosphoric acid		96 h	138 mg/l	LC50	

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CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
71-43-2	Benzene	Oncorhynchus mykiss (rainbow trout)	96 h	5.9 mg/l	LC50	
1333-86-4	Carbon black	Danio rerio (zebra fish)	4 days	1,000 mg/l	LC50	
64-17-5	Ethyl alcohol	Carassius auratus (goldfish)	96 h	140 mg/l	LC50	
100-41-4	Ethylbenzene	Oncorhynchus mykiss (rainbow trout)	96 h	4.2 mg/l	LC50	
110-19-0	Isobutyl acetate	Pimephales promelas (fathead minnow)	96 h	62 mg/l	LC50	
78-83-1	Isobutyl alcohol	Leuciscus idus (Golden orfe)	2 days	1,220 mg/l		
78-83-1	Isobutyl alcohol	Pimephales promelas (fathead minnow)	4 days	1,600 mg/l		
67-56-1	Methyl alcohol	Pimephales promelas (fathead minnow)	4 days	28,100 mg/l		
108-32-7	Propylene carbonate	Leuciscus idus (Golden orfe)	96 h	5,300 mg/l	LC50	
75-56-9	Propylene oxide	Oncorhynchus mykiss (rainbow trout)	96 h	52 mg/l	LC50	
109-99-9	Tetrahydrofuran	Pimephales promelas (fathead minnow)	4 days	2,160 mg/l		
108-88-3	Toluene	Pimephales promelas (fathead minnow)	4 days	32 mg/l		
108-88-3	Toluene	Lepomis macrochirus (Bluegill sunfish)	4 days	60 ppm		
108-88-3	Toluene	Carassius auratus (goldfish)	4 days	60 ppm		
1314-13-2	Zinc oxide	Oncorhynchus mykiss (rainbow trout)	96 h	1.1 mg/l	LC50	

Toxicity with aquatic plants

CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
71-36-3	N-butyl alcohol	Daphnia	1 day	1,855 mg/kg		
141-78-6	Ethyl acetate	Daphnia	2 days	230 mg/l		
108-65-6	Propylene glycol monomethyl ether acetate	Daphnia	2 days	408 mg/l		
7779-90-0	Zinc phosphate	Algae	72 h	0.3 mg/l	EC50	
68611-44-9	Amorphous silica-fumed	Desmodesmus subspicatus (green algae)	72 h	10,000 mg/l	IC50	
71-43-2	Benzene	green algae (type not specified)	72 h	29 mg/l	IC50	
1333-86-4	Carbon black	Algae	3 days	10,000 mg/l	EC50	
100-41-4	Ethylbenzene	green algae (type not specified)	72 h	4.6 mg/l	EC50	

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CAS-No.	Chemical Name	Species	Exposure time	Value	Type	Method
78-83-1	Isobutyl alcohol	Daphnia	2 days	1,994 mg/l		
108-32-7	Propylene carbonate	Desmodesmus subspicatus (green algae)	72 h	500 mg/l	EC50	

Mobility
No information available.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1950
Proper shipping name:	AEROSOLS
Hazard Class:	2.1
Subsidiary Hazard Class:	Not applicable.
Packing group:	
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1950
Proper shipping name:	AEROSOLS, FLAMMABLE
Hazard Class:	2.1
Subsidiary Hazard Class:	Not applicable.
Packing group:	

DOT

UN number:	1950
Proper shipping name:	AEROSOLS
Hazard Class:	2.1
Subsidiary Hazard Class:	Not applicable.
Packing group:	
Marine Pollutant:	no
EmS:	F-D,S-U

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

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TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311 - 312	313	RQ(lbs)	HAP
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
68476-85-7	Liquified compressed gas	N	NR	NR	A,C,F,N,R	N	NR	N
79-20-9	Methyl acetate	N	NR	NR	A,C	N	100	N
108-65-6	Propylene glycol monomethyl ether acetate	N	NR	NR	F	N	NR	N
108-10-1	Methyl isobutyl ketone	N	NR	NR	A,C,F	Y	5,000	Y
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
25068-38-6	Epoxy resin	N	NR	NR	C	N	NR	N
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N
7779-90-0	Zinc phosphate	N	NR	NR	N	Y	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit

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OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
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SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

Version	Changes
4.0	2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15

Revision Date: 2014-05-16

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B12806572

Centari® Topcoat 5.0 VOC (A Quality)

GENERAL

DESCRIPTION
A 5.0 lb/gal (600 g/l) VOC, three-component, acrylic enamel topcoat designed for overall applications. It features good versatility, appearance and durability.

NOT RECOMMENDED FOR
Immersion service or over lacquer finishes.

COMPATIBILITY WITH OTHER COATINGS
Compatible with all Axalta Transportation primers.

DRY FILM CHARACTERISTICS

Chemical Resistance	VERY GOOD
Weatherability	EXCELLENT
Humidity Resistance	EXCELLENT
Acid Resistance	VERY GOOD
Solvent Resistance	VERY GOOD
Abrasion Resistance	VERY GOOD
Flexibility	VERY GOOD

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

MIXING

MIX RATIO
Combine components and mix thoroughly. The use of a cyclone paint shaker is recommended. Filter material prior to spray application.

Component	Volume
Centari® Topcoat (A quality)	8
793S™ Activator	1
Centari® Reducer	2

8034S™ Cool Weather Reducer
8022S™ Mid Temp Reducer
8093S™ Overall Reducer
8096S™ Hot Weather Reducer

ADDITIVES
Fish Eyes:
Add up to 1 oz. of 259S™ Additive per RTS gal.

INDUCTION TIME
No induction time required.

POT LIFE - 70°F (21°C)
3-4 hours as activated

APPLICATION

APPLICATION CONDITIONS
Do not apply if material, substrate or ambient temperature is less than 50°F (10°C) or above 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%.

APPLICATION EQUIPMENT
Refer to spray equipment documentation for setting recommendations.
Pressure Pot
Gravity Feed
Suction Cup
Air-Assisted Airless

APPLICATION
- Apply three full wet coats. No additional flash time is required. If a mist-coat is required for metallic colors, mist coat while coating is still wet.
- If clearcoating, allow topcoat to cure overnight before applying Imron® 500S™ clearcoat to solid or metallic colors. Follow clearcoat recommendations for activation and application.
- Note: Centari® Topcoat can be cleacoated up to 48 hours after the final coat without the need to sand.

CLEANUP SOLVENTS
3602S™ Lacquer Thinner
106™ Lacquer Thinner
107™ Low VOC Gun Cleaner
108™ Low HAPS Cleaning Solvent

ADDITIONAL COMMENTS
Heating activated material above 110°F (43°C) will cause the product to gel. Sanding is recommended for recoating if the topcoat has been air-dried more than 16 hours or force dried.

DRY TIMES

AIR DRY
77°F (25°C) & 50% RH at recommended film thickness

Tack Free:	1-2 hours
Tape Free:	4 hours

FORCE DRY
30 minutes at 150-180°F (66-82°C)

PHYSICAL PROPERTIES

Maximum Service Temperature:	200°F (92°C) in continuous service 300°F (148°C) in intermittent heat
Weight Per Gallon (component only)	Various
Weight Per Liter (component only)	Various
Suggested Dry Film Thickness	1.9 – 2.2 mils
Gloss	High
Color	Available in Solid and Metallic Colors
Flash Point (Closed Cup)	See MSDS/SDS
Shelf Life	12 months minimum

RTS mixed 8:1:2 with 793S and:	**8022S / 8034S / 8093S / 8096S**
Gallon Weight pounds per gallon - Average	8.17
Gallon Weight grams per liter - Average	979

VOC AP pounds per gallon - Maximum	4.6
VOC AP grams per liter - Maximum	550
VOC LE pounds. per gallon - Maximum	4.7
VOC LE grams per liter - Maximum	559
Weight Solids - Average	42.5%
Volume Solids - Average	33.0%
Weight Volatiles - Average	57.5%
Weight Water - Average	0.0%
Volume Water - Average	0.0%
Weight Exempt Solvents - Average	1.4%
Volume Exempt Solvents - Average	1.7%
Theoretical Coverage per RTS Gallon at 1 mil DFT	529 ft^2 (49.1 m^2)

VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS/SDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Revised: September 2014

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Imron® Elite Productive Topcoat 3.5 VOC (EX quality)

GENERAL

DESCRIPTION
A 3.5 lb. /gal (420 g/l) VOC, two-component, productive, polyurethane topcoat designed for panel and overall and two-tone applications. It features an extensive color palette, premium appearance and excellent performance. Available in solid and metallic colors, this topcoat uses the Axalta Multi-Temperature activator/reducer platform.

SUGGESTED USES
- Panel, multi-panel, overall and two-tone applications
- Commercial vehicles, transit bus and light rail, beverage and delivery trailers, emergency vehicles

COMPATIBILITY WITH OTHER COATINGS
Compatible with all Axalta Transportation primer systems.

NOT RECOMMENDED FOR
- Immersion Service
- Use over lacquer finishes

DRY FILM CHARACTERISTICS

Chemical Resistance	EXCELLENT
Weatherability	EXCELLENT
Humidity Resistance	EXCELLENT
Acid Resistance	EXCELLENT
Alkali Resistance	EXCELLENT
Solvent Resistance	VERY GOOD
Abrasion Resistance	EXCELLENT
Flexibility	EXCELLENT

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

MIXING

COMPONENT
Imron® Elite™ Productive (EX Quality)
15303S™ Low Temp Activator
15305S™ Mid Temp Activator
15307S™ High Temp Activator
15308S™ Very High Temp Activator

MIX RATIO
Thoroughly mix prior to activation. The use of a Cyclone® shaker is recommended. Combine components and mix thoroughly. Filter material prior to spray application.

Component	Volume
Imron® Elite™ Productive (EX Quality)	3
15303S™ / 15305S™ / 15307S™ / 15308S™ Activator	1

ADDITIVES
Pot Life Extension:
Add 2 oz. 189S™ Accelerator per RTS gallon.

Increased cure (small area repair, stripes):
Add up to 2 oz. 389S™ Accelerator per RTS gallon.

Note: 8989S™ Accelerator will shorten pot life and is not recommended.

VISCOSITY
Depending on color, the activated paint will have a viscosity of 10-20 seconds in a #3 Zahn cup.

INDUCTION TIME
No induction time required.

POT LIFE - 70°F (21°C)
30 minutes as activated
1 hour with 189S™ accelerator
45 minutes with 389S™ accelerator

APPLICATION

APPLICATION EQUIPMENT
Refer to spray equipment documentation for setting recommendations.
Pressure Pot (recommended)
Gravity Feed
Suction Spray
Air-Assisted Airless

APPLICATION CONDITIONS
Do not apply if material, substrate or ambient temperature is less than 50°F (10°C) or above 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%.

APPLICATION
- Pressure pot fluid delivery should be set for 10-12 ounces per minute.
- Apply using a cross-coat technique - a wet coat using a top-to-bottom motion and a medium-wet second coat using a side-to-side motion. Flash 30 seconds to 5 minutes between coats. In general, the shorter the flash the smoother the appearance.
- When recoating Imron® Elite™ Productive with itself, sanding is required if the enamel has air dried more than 16 hours or has been force dried.

ADDITIONAL COMMENTS
Heating activated material above 110°F (43°C) will cause gelation.

APPLICATION SOLVENTS
Ready-to-spray VOC (LE) is below 3.5 lbs. /gal VOC upon activation. Further reduction may result in greater than 3.5 VOC.

CLEANUP SOLVENTS
3602S™ Lacquer Thinner
106™ Lacquer Thinner
107™ Low VOC Gun Cleaner
108™ Low HAPS Cleaning Solvent

DRY TIMES

AIR DRY
Cure Time At Recommended Thickness – 77°F (25°C) and 50% RH

	With 189S™	With 389S™
Dry to Touch:	3-5 hours	0.5-1 hr
Tack Free:	6-8 hours	2-3 hours
Tape Free:	10-12 hours	3-5 hours
Dry to Assemble:	72 hours	72 hours

FORCE DRY
30 min at 120-140°F (48-60°C) after a flash time of 15 minutes following application of final coat.

POINT TO POINT MELT-IN GUIDE - 70°F (21°C) AND 50% RH

Activator	Mixing Reducer	Time
15303S™	15375S™ Low Temp Reducer	5-10 min
15305S™	15385S™ Mid Temp Reducer	10-15 min
15307S™	15395S™ High Temp Reducer	15-20 min
15308S™	15397S™ Extra Slow Reducer	20-25 min

Depending on the surface area being coated, air temperature, and booth air flow, the above combinations of activators and mixing reducers will assist with overspray melt-in for the stated times.

HOT WEATHER APPLICATION
In addition to using the high temperature activator and reducers, add up to 10% by volume 15399S™ High Temp Additive to unactivated Imron® Elite™ Productive color and activate 3:1.

PHYSICAL PROPERTIES

Maximum Service Temperature:	200°F (92°C) in continuous service
Weight Per Gallon (component only)	Various
Weight Per Liter (component only)	Various
Suggested Dry Film Thickness	1.8 – 2.2 mils
Gloss	High
Color	Available in Solid and Metallic Colors
Flash Point (Closed Cup)	See MSDS/SDS
Shelf Life	12 months minimum

RTS mixed 3:1 with: **Includes 389S**	**15303S** **15305S** **15307S** **15308S**
Gallon Weight pounds per gallon - Average	9.13
Gallon Weight grams per liter - Average	1094
VOC AP pounds per gallon - Maximum	3.0
VOC AP grams per liter - Maximum	363
VOC LE pounds. per gallon - Maximum	3.4
VOC LE grams per liter - Maximum	403
Weight Solids - Average	59.2%
Volume Solids - Average	48.3%
Weight Volatiles - Average	51.7%
Weight Water - Average	0.0%
Volume Water - Average	0.0%
Weight Exempt Solvents - Average	7.6%
Volume Exempt Solvents - Average	9.7%

Theoretical Coverage per RTS Gallon at 1 mil DFT	775 ft^2 (72.0 m^2)

VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS/SDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

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Excel™ Pro Topcoat 3.5 VOC (EZ quality)

GENERAL

DESCRIPTION
A 3.5 lb. /gal (420 g/l) VOC, two-component, acrylic urethane topcoat designed for panel, multi-panel and overall applications. Excel Pro is ideal for refinishers who want a cost-effective finish that features good performance, good color capability and very good appearance. Available in solid and metallic colors, this topcoat uses the Axalta Multi-Temperature activator/reducer platform.

COMPATIBILITY WITH OTHER COATINGS
Compatible with all Axalta Transportation primer systems.

NOT RECOMMENDED FOR
- Immersion Service
- Use over lacquer finishes

DRY FILM CHARACTERISTICS

Chemical Resistance	EXCELLENT
Weatherability	VERY GOOD
Humidity Resistance	EXCELLENT
Acid Resistance	EXCELLENT
Alkali Resistance	EXCELLENT
Solvent Resistance	VERY GOOD
Abrasion Resistance	EXCELLENT
Flexibility	EXCELLENT

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

MIXING

MIX RATIO
Thoroughly mix prior to activation. The use of a Cyclone® shaker is recommended. Combine components and mix thoroughly. Filter material prior to spray application.

Component	Volume
Excel™ Pro (EZ Quality)	4
Axalta 1530XS™ Activator	1

15303S™ Low Temp Activator
15305S™ Mid Temp Activator
15307S™ High Temp Activator
15308S™ Very High Temp Activator

ADDITIVES
Pot Life extension:
Add 2 oz. 189S™ Accelerator per RTS gallon.

Increased cure (small area repair, stripes):
Add up to 2 oz. 389S™ Accelerator per RTS gallon.

Note: 8989S™ Accelerator will shorten pot life and is not recommended.

VISCOCITY
10 – 20 with #3 Zahn cup, depending on color.

INDUCTION TIME
No induction time required.

POT LIFE - 70°F (21°C)
30 minutes as activated
1 hour with 189S™ accelerator
45 minutes with 389S™ accelerator

APPLICATION

APPLICATION EQUIPMENT
Refer to spray equipment documentation for setting recommendations.
Pressure Pot (recommended)
Gravity Feed
Suction Spray
Air-Assisted Airless

APPLICATION
- Pressure pot fluid delivery should be set for 10-12 ounces per minute.
- Apply using a cross-coat technique - a wet coat using a top-to-bottom motion and a medium-wet second coat using a side-to-side motion. Flash 30 seconds to 5 minutes between coats. In general, the shorter the flash the smoother the appearance.
- When recoating Excel™ Pro with itself, sanding is required if the enamel has air dried more than 16 hours or has been force dried.

APPLICATION SOLVENTS
Ready-to-spray VOC is below 3.5 lbs. /gal VOC upon activation. Further reduction may result in greater than 3.5 VOC.

CLEANUP SOLVENTS
3602S™ Lacquer Thinner
106™ Lacquer Thinner
107™ Low VOC Gun Cleaner
108™ Low HAPS Cleaning Solvent

ADDITIONAL COMMENTS
- Heating activated material above 110°F (43°C) will cause gelation.

DRY TIMES

AIR DRY
Cure Time At Recommended Thickness – 77°F (25°C) and 50% RH

	With 189S™	With 389S™
Dry to Touch	3-5 hours	30-60 minutes
Tack Free	6-8 hours	2-3 hours
Tape Free	10-12 hours	3-5 hours
Dry to Assemble	72 hours	72 hours

FORCE DRY
30 min between 120°F-140°F (48°C- 60°C) after a flash time of 15 min following application of final coat.

Point to Point Melt-In Guide - 70°F (21°C) AND 50% RH

Activator	Mixing Reducer	Flash Time
15303S™	15375S™ Low Temp Reducer	5-10 min
15305S™	15385S™ Mid Temp Reducer	10-15 min
15307S™	15395S™ High Temp Reducer	15-20 min
15308S™	15397S™ Extra Slow Reducer	20-25 min

Depending on the surface area being coated, air temperature, and booth air flow, the above combinations of activators and mixing reducers should provide excellent overspray melt-in for the stated times.

HOT WEATHER APPLICATION
In addition to using the high temperature activator and reducers, add up to 10% by volume 15399S™ High Temp Additive to unactivated Excel™ Pro color and activate 4:1.

PHYSICAL PROPERTIES

Maximum Service Temperature:	200°F (92°C) in continuous service
Weight Per Gallon (component only)	Various
Weight Per Liter (component only)	Various
Suggested Dry Film Thickness	1.8 – 2.2 mils
Gloss	High
Color	Available in Solid and Metallic Colors
Flash Point (Closed Cup)	See MSDS/SDS
Shelf Life	12 months minimum

RTS mixed 4:1 with: **Includes 189S**	**15303S** **15305S** **15307S** **15308S**
Gallon Weight pounds per gallon - Average	8.96
Gallon Weight grams per liter - Average	1074
VOC AP pounds per gallon - Maximum	3.1
VOC AP grams per liter - Maximum	371
VOC LE pounds. per gallon - Maximum	3.4
VOC LE grams per liter - Maximum	413
Weight Solids - Average	57.4%
Volume Solids - Average	47.0%
Weight Volatiles - Average	42.6%
Weight Water - Average	0.0%
Volume Water - Average	0.0%
Weight Exempt Solvents - Average	8.0%
Volume Exempt Solvents - Average	10.3%
Theoretical Coverage per RTS Gallon at 1 mil DFT	754 ft^2 (70.0 m^2)

VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

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Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

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CHROMAPREMIER® BASECOAT

GENERAL

DESCRIPTION
A solventborne basecoat designed for premium spot, panel and overall repairs. It is high-hiding and lays down smoothly with trouble-free application and excellent mottle control. It delivers superior appearance in solid, metallic, pearl and special-effect ChromaLusion® Colors.

The products referenced herein may not be available for sale in your market. Please consult your distributor for product availability.

MIXING

COMPONENTS
ChromaPremier® Basecoat (F Quality)
7160S™ / 7175S™ / 7185S™ / 7195S™ Basemaker
ChromaPremier® Pro 14304S™ / 14305S™ / 14306S™ Activator
ChromaBase® "4 to 1" 7765S™ / 7775S™ / 7785S™ / 7795S™ Activator-Reducer
ChromaPremier® 12305S™ Activator

	65°F (18°C)	75°F (24°C)	85°F (29°C)	95°F (35°C)
Spot Repair	7160S™	7175S™	7185S™	7185S™
Panel Repair	7160S™	7175S™	7185S™	7195S™
Overall Repair	7175S™	7185S™	7195S™	7195S™

Tips for Success
For spray-sensitive colors, select a slower Basemaker for improved application and appearance.

MIX RATIO

Component	Volume
ChromaPremier® Basecoat	1
Basemaker	1

Stir thoroughly, then activate as follows. ChromaPremier® Basecoat must be activated with an activator listed in the component section.

RTS Color	14305S™Activator
1 quart	1 ounce (32 grams)
1 pint	½ ounce (16 grams)
½ pint	¼ ounce (8 grams)

Tips for Success
ChromaPremier® Basecoat may be reduced at a 2:1 ratio when faster coverage is desired. Note: Be sure to activate the RTS basecoat at the normal 1 ounce of Activator per RTS quart of color before application.

VISCOSITY
15-17 seconds in a Zahn #2.

TIPS FOR SUCCESS
- Use activated basecoat within 2 hours for optimum performance.
- Do not use activated basecoat after the 8-hour pot life.
- Activate only what you intend to spray.

POT LIFE
8 hours at 70° F (21° C)

ADDITIVES

Accelerator:	Not recommended
Fish Eye Eliminator:	Not recommended
Flex Additive:	Not recommended - See Tips for Success
Retarder:	Not recommended

Tips for Success

- If fish eyes occur, allow the basecoat to dry thoroughly, and then apply dry coats of base color to bridge the affected area.
- The use of activator in ChromaPremier® Basecoat is mandatory. The recommended 1 ounce of ChromaPremier® 14305S™ per RTS quart of basecoat gives optimum performance over flexible substrates. No other flex additive is necessary.

TINTING
Up to 5% with MasterTint® mixing colors that are 6.0 VOC or below.

CLEARCOATS
ChromaPremier® Pro 74500S™ Productive Clearcoat
ChromaPremier® Pro 74700S™ Productive Express Clearcoat
ChromaPremier® 72200S™ Productive Clearcoat
ChromaPremier® 72500S™ Premium Appearance Clearcoat
ChromaBase® "4 to 1" HC-7776S™ Snap Dry Clearcoat
ChromaClear® 7400S™ Non-Stop Clearcoat
ChromaClear® 7900S™ Multi-Use Clearcoat
ChromaBase® "4 to 1" G2-7779S™ Panel and Overall Clearcoat
ChromaClear® G2-4500S™ Ultra Productive Baking Clearcoat
ChromaClear® G2-4700S™ Ultra Productive Air Dry Clearcoat
Plas-Stick® 2370S™ Flexible Matted Clearcoat
Cromax® LE LE5100S™ Multi-Panel Clearcoat
Cromax® LE LE5400S™ Snap Dry Clearcoat
Cromax® LE LE5600S™ Air Dry Productive Clearcoat
Cromax® Pro LE LE8300S™ Productive Clearcoat
Cromax® Pro LE LE8700S™ Premium Appearance Clearcoat

APPLICATION

SUBSTRATES
222S™ Midcoat Adhesion Promoter
Plas-Stick® 2340S™ Flexible Adhesion Sealer
2580CR™ / 2510S™ / 2540S™ / 2570S™ LF Epoxy DTM Primer
ChromaPremier® Pro 33430S™ Productive Primer Sealer
4004S™ Ultra Productive 2K Primer Filler
ChromaPremier® 42400S™ / 42410S™ / 42440S™ / 42470S™ / 2K Premier Sealer
ChromaBase® "4 to 1" 7701S™ / 7704S™ / 7707S™ 2K Urethane Primer Filler
ChromaBase® "4 to 1" 7710S™ / 7740S™ / 7770S™ 2K Urethane Sealer
Cromax® LE LE3004S™ 2K Primer Surfacer – National Rule
Cromax® LE LE3010S™ / LE3040S™ / LE3070S™ 2K Primer Sealer – National Rule
Plas-Stick® 2350S™ Flexible Additive
LE3130S™ and A-3130S™ UVA Primer Surfacer
Properly sanded OEM finishes

SURFACE PRePARATION

- Prepare all surfaces to be repainted using the recommended undercoat systems and procedures.
- Finish sand with P400 DA, P600 grit or finer (dry or wet).
- Mask the entire vehicle to protect from overspray.

Tack with appropriate tack cloth prior to applying color.

GUN SETUPS*

	Spot/Panel	Overall
Compliant		
Siphon Feed:	1.3 mm-1.5 mm	1.4 mm-1.6 mm
Gravity Feed:	1.3 mm-1.5 mm	1.4 mm-1.6 mm
HVLP		
Siphon Feed:	1.3 mm-1.5 mm	1.4 mm-1.6 mm
Gravity Feed:	1.3 mm-1.5 mm	1.4 mm-1.6 mm

AIR PRESSURE*

Compliant	35-45 psi at the gun
HVLP	6-8 psi at the gun cap

Refer to the manufacturer's directions for gun specific recommendations.

APPLICATION
Apply 2-3 medium coats until hiding and color match are achieved. Flash 5-10 minutes between coats.

BLENDING
Apply 1 coat of 222S™ Midcoat Adhesion Promoter over the entire repair area. Apply the first coat of color beyond the primed area. Apply the second coat just beyond the first coat. Apply subsequent coats just beyond the previous coats, staying within the area covered by 222S™ Midcoat Adhesion Promoter. Follow recommended flash times and then apply clearcoat over the entire panel.

Tips for Success
- Taper out each consecutive coat to melt the new color into the old color.
- Use of a slower Basemaker can improve the appearance of the blend edge.

Use 69301S™ Basecoat Blender for difficult to blend colors, optimal flake control, improved edge wetting and improved melt-in.

DRY TIMES

AIR DRY AT 70°F (21°C)

Flash before Clearcoat:	15-30 minutes
Flash before Tape:	30 minutes
Flash before Two-Toning:	30 minutes
Maximum Allowable Dry before Clearcoating:	24 hours

FORCE DRY
Not recommended

Tips for Success
Extend the basecoat flash to the full 30 minutes for higher film builds or in cooler temperatures.

RECOATABILITY/RE-REPAIR
ChromaPremier® Basecoat may be recoated with itself within 24 hours.

SANDING
ChromaPremier® Basecoat dries to a smooth matte finish and should not require sanding. Nib sanding of small areas to remove dirt must be followed by the application of more color before clearcoating.

CLEANUP
Clean spray equipment immediately after use with lacquer thinner.

PHYSICAL PROPERTIES

All Values Ready To Spray

Max. VOC (LE):	5.0 lbs./gal (599 g/L)
Max. VOC (AP):	4.5 lbs./gal (541 g/L)
Avg. Gal. Wt.:	8.34 lbs./gal (999 g/L)
Avg. Wt.% Volatiles:	57.9%
Avg. Wt.% Exempt Solvent:	20.7%
Avg. Wt.% Water:	0.0%
Avg. Vol.% Exempt Solvent:	21.0%
Avg. Vol.% Water:	0.0%
Recommended Dry Film Thickness:	0.5 – 1.5 mils.
Flash Point:	See MSDS/SDS

VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Revised: July 2015

In the United States:
1.855.6.AXALTA
cromax.us

In Canada:
1.800.668.6945
cromax.ca

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1. Identification of the substance/mixture and of the company/undertaking

Product name	High Gloss Alkyd DTM - Black	
Product code	LF-64034P	Formula Date: 2012-10-18
Intended use	Coating for professional use	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information Medical emergency Transportation emergency	(855) 6-AXALTA (855) 274-5698 (800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Carcinogenicity	Category 2
Target Organ Systemic Toxicant - Single exposure	Category 3
Target Organ Systemic Toxicant - Repeated exposure	Category 2

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols

Signal word: Warning

Hazard statements:
Suspected of causing cancer.
Flammable liquid and vapour.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
May cause an allergic skin reaction.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:
Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
38.8 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
1330-20-7	Xylene	17%
64742-95-6	Aromatic hydrocarbon	4 - 15%
100-41-4	Ethylbenzene	4.2%
95-63-6	1,2,4-trimethyl benzene	3%
108-10-1	Methyl isobutyl ketone	3.3%
1333-86-4	Carbon black	2.1%
110-43-0	Methyl amyl ketone	1 - 4%
78-93-3	Methyl ethyl ketone	1 - 4%
96-29-7	Methyl ethyl ketoxime	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 60 - 70%
OSHA Hazardous: No

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

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Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

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Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	100 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 & 12 hour	TWA	50 ppm	
100-41-4	Ethylbenzene	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
		Dupont	8 & 12 hour	TWA	25 ppm	
95-63-6	1,2,4-trimethyl benzene	ACGIH	8 hr	TWA	25 ppm	
		OSHA	8 hr	TWA	25 ppm	
108-10-1	Methyl isobutyl ketone	ACGIH	15 min	STEL	75 ppm	
			8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
1333-86-4	Carbon black	ACGIH	8 hr	TWA	3 mg/m3	
		OSHA	8 hr	TWA	3.5 mg/m3	
		Dupont	8 & 12 hour	TWA	0.5 mg/m3	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
78-93-3	Methyl ethyl ketone	ACGIH	8 hr	TWA	200 ppm	
		OSHA	8 hr	TWA	200 ppm	
		Dupont	8 & 12 hour	TWA	200 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

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9. Physical and chemical properties

Appearance

Form: liquid Colour: black

Flash point	77 °F	
Lower Explosive Limit	Not applicable.	
Upper Explosive Limit	Not applicable.	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	6.3 hPa	
Water solubility	moderate	
Vapor density of principal solvent (Air = 1)	0	
Approx. Boiling Range	Not applicable.	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	9.39	
Specific Gravity	1.13	
Percent Volatile By Volume	46.85%	
Percent Volatile By Weight	37.03%	
Percent Solids By Volume	53.15%	
Percent Solids By Weight	62.97%	
pH (waterborne systems only)	not applicable	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	300 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.5	
VOC* as packaged (lbs/gal)	3.5	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
Not classified according to GHS criteria

% of unknown composition 38.8 %

Skin corrosion/irritation

Xylene	Category 2
Aromatic hydrocarbon	Category 3
1,2,4-trimethyl benzene	Category 2
Methyl isobutyl ketone	Category 3
Methyl ethyl ketone	Category 3

Serious eye damage/eye irritation

Xylene	Category 2A
1,2,4-trimethyl benzene	Category 2A
Methyl isobutyl ketone	Category 2A
Methyl ethyl ketone	Category 2A
Methyl ethyl ketoxime	Category 1

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Methyl ethyl ketoxime	Category 1

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Germ cell mutagenicity
Not classified according to GHS criteria

Carcinogenicity

Methyl ethyl ketoxime	Category 2

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Respiratory system 1,2,4-trimethyl benzene
  Central nervous system 1,2,4-trimethyl benzene

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure

- **Skin Absorption**

  Central nervous system 1,2,4-trimethyl benzene

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

Ethylbenzene	IARC 2B
Methyl isobutyl ketone	IARC 2B
Carbon black	IARC 2B

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

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13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III

DOT

UN number:	1263
Proper shipping name:	PAINT
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	III
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation
Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status
In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status
All components of the mixture are listed on the DSL.

Photochemical Reactivity
Photochemically reactive

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

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HESL-22507

Regulatory information

CAS #	Ingredient	EPCRA 302	EPCRA TPQ	EPCRA RQ	EPCRA 311/312	EPCRA 313	CERCLA RQ(lbs)	CAA HAP
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
95-63-6	1,2,4-trimethyl benzene	N	NR	NR	A,C	Y	NR	N
108-10-1	Methyl isobutyl ketone	N	NR	NR	A,C,F,N,R	Y	5,000	Y
1333-86-4	Carbon black	N	NR	NR	C	N	NR	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
78-93-3	Methyl ethyl ketone	N	NR	NR	A,C,F	N	5,000	N
96-29-7	Methyl ethyl ketoxime	N	NR	NR	A,C,F,N,R	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 1 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
SDS prepared by:
Axalta Coating Systems Regulatory Affairs
Report version

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RESL-20507

Version	Changes
5.0	2, 8, 11, 15

Revision Date: 2016-01-29

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HESL-2050 /

1. Identification of the substance/mixture and of the company/undertaking

Product name	Flattener	
Product code	PT196	Formula Date: 2014-02-28
Intended use	Intermediate	
	Axalta Coating Systems, LLC Applied Corporate Center 50 Applied Bank Boulevard, Suite 300 US Glen Mills, PA 19342	
Telephone	Product information	(855) 6-AXALTA
	Medical emergency	(855) 274-5698
	Transportation emergency	(800) 424-9300 (CHEMTREC)

2. Hazards identification

This preparation is hazardous per the following GHS criteria

GHS-Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitisation	Category 1
Target Organ Systemic Toxicant - Single exposure	Category 3

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown.

GHS-Labelling

Hazard symbols	
Signal word	Danger
Hazard statements	Highly flammable liquid and vapour. May cause drowsiness or dizziness. May cause an allergic skin reaction. Causes serious eye irritation.
Precautionary statements	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ vapours/ spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see supplemental first aid instructions on this label). If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification
Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:
0 %

3. Composition/information on ingredients

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical Name	Concentration
67-64-1	Acetone	15 - 26%
110-43-0	Methyl amyl ketone	15 - 26%
123-86-4	Butyl acetate	4 - 15%
67-63-0	Isopropyl alcohol	4 - 15%
141-78-6	Ethyl acetate	1 - 4%
628-63-7	Primary amyl acetate	1 - 4%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	0.0 - 1.0%
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	0.0 - 1.0%

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Non-regulated ingredients 50 - 60%
OSHA Hazardous: Yes

4. First aid measures

Eye contact
Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact
Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

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Inhalation
Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary
No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Firefighting measures

Suitable extinguishing media
Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazardous combustion products
CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards
Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures
Full protective flameproof clothing should be worn as appropriate. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. Accidental release measures

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Procedures for cleaning up spills or leaks
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow C02 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions
Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. Handling and storage

Precautions for safe handling
Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY IGNITE EXPLOSIVELY. Vapors may spread long distances. Prevent buildup of vapors. Extinguish all pilot lights and turn off heaters, non-explosion proof electrical equipment and other sources of ignition during and after use and until all vapors are gone. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F).
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion
Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers
Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage
Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls/personal protection

Engineering controls and work practices
Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
67-64-1	Acetone	ACGIH	15 min	STEL	750 ppm	

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CAS-No.	Chemical Name	Source	Time	Type	Value	Note
			8 hr	TWA	500 ppm	
		OSHA	8 hr	TWA	1,000 ppm	
		Dupont	8 & 12 hour	TWA	500 ppm	
110-43-0	Methyl amyl ketone	ACGIH	8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
141-78-6	Ethyl acetate	ACGIH	8 hr	TWA	400 ppm	
		OSHA	8 hr	TWA	400 ppm	
628-63-7	Primary amyl acetate	ACGIH	15 min	STEL	100 ppm	
			8 hr	TWA	50 ppm	
		OSHA	8 hr	TWA	100 ppm	

** STEL = Short term exposure limit.
TWA = Time-weighted average.

Protective equipment
Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection
Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and MSDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection
Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection
Neoprene gloves and coveralls are recommended.

Hygiene measures
Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Environmental exposure controls
Do not let product enter drains. For ecological information, refer to Ecological Information Section 12.

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9. Physical and chemical properties

Appearance

Form: liquid Colour: white Odour: Characteristic Paint Odor

Flash point	5 °F	
Lower Explosive Limit	1.1 %	
Upper Explosive Limit	12.8 %	
Evapouration rate	Slower than Ether	
Vapor pressure of principal solvent	50.1 hPa	
Water solubility	appreciable	
Vapor density of principal solvent (Air = 1)	2	
Approx. Boiling Range	83 °C	
Approx. Freezing Range	Not applicable.	
Gallon Weight (lbs/gal)	8.81	
Specific Gravity	1.06	
Percent Volatile By Volume	65.95%	
Percent Volatile By Weight	51.16%	
Percent Solids By Volume	34.05%	
Percent Solids By Weight	48.84%	
pH (waterborne systems only)	No data available.	
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	360 °C	DIN 51794
Decomposition temperature	Not applicable.	
Viscosity (23 °C)	Not applicable.	ISO 2431-1993
VOC* less exempt (lbs/gal)	3.8	
VOC* as packaged (lbs/gal)	2.9	

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability
Stable

Conditions to avoid
Stable under recommended storage conditions.

Materials to avoid
None reasonably foreseeable.

Hazardous decomposition products
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization
Will not occur.

Sensitivity to Static Discharge
Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact
None known.

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11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product mixed with an isocyanate activator/hardener (see MSDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion
May result in gastrointestinal distress.

Skin or eye contact
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity
not hazardous

Acute dermal toxicity
not hazardous

Acute inhalation toxicity
not hazardous

% of unknown composition 0 %

Skin corrosion/irritation
Not classified according to GHS criteria

Serious eye damage/eye irritation

Acetone	Category 2A
Isopropyl alcohol	Category 2A
Ethyl acetate	Category 2A

Respiratory sensitisation
Not classified according to GHS criteria

Skin sensitisation

Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Category 1
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	Category 1

Germ cell mutagenicity
Not classified according to GHS criteria

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Carcinogenicity
Not classified according to GHS criteria

Toxicity for reproduction
Not classified according to GHS criteria

Target Organ Systemic Toxicant - Single exposure

- **Inhalation**

  airway sensitivity Methyl amyl ketone
  Narcotic effects Methyl amyl ketone
  Respiratory system Isopropyl alcohol
  reproductive organs Ethyl acetate

- **Ingestion**

  Respiratory tract irritation Methyl amyl ketone
  Narcotic effects Methyl amyl ketone

Target Organ Systemic Toxicant - Repeated exposure
Not classified according to GHS criteria

Aspiration toxicity
Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE),etc.)
No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method
Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

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International transport regulations

IMDG (Sea transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no

ICAO/IATA (Air transport)

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II

DOT

UN number:	1263
Proper shipping name:	PAINT RELATED MATERIAL
Hazard Class:	3
Subsidiary Hazard Class:	Not applicable.
Packing group:	II
Marine Pollutant:	no
EmS:	F-E,S-E

Matters needing attention for transportation

Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information

TSCA Status

In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status

All components of the mixture are listed on the DSL.

Photochemical Reactivity

Non-photochemically reactive

Regulatory information

		EPCRA					CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
67-64-1	Acetone	N	NR	NR	A,C,F	N	5,000	N
110-43-0	Methyl amyl ketone	N	NR	NR	A,C,F	N	NR	N
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
67-63-0	Isopropyl alcohol	N	NR	NR	A,C,F,N,R	N	NR	N
141-78-6	Ethyl acetate	N	NR	NR	C,F	N	NR	N
628-63-7	Primary amyl acetate	N	NR	NR	A,C	N	5,000	N
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	N	NR	NR	A,C,F,N,R	N	NR	N
82919-37-7	Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	N	NR	NR	A,C,F,N,R	N	NR	N

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Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Axalta Coating Systems
The document reflects information provided to Axalta Coating Systems by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Axalta Coating Systems. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
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Imron® 2.1 +
Reduced Gloss Polyurethane Topcoat
(QM, QA, QF Quality)

GENERAL

DESCRIPTION
A high solids aliphatic polyurethane enamel available in multiple gloss levels. It may be applied by brush, roll or spray application. This two-component, VOC conforming (2.1 lbs/gal) product is based upon unique Axalta formulation technology designed to produce properties of both polyester and acrylic polyurethanes and to deliver high performance.

SUGGESTED USES
As a high performance, tough, industrial polyurethane topcoat over properly prepared and primed steel, galvanized steel, stainless steel, aluminum, concrete, concrete block or wood where:
- Outstanding long term reduced gloss and color retention are desired
- Excellent resistance to chemicals is required
- Use in corrosive or industrial marine environments is needed
- Outstanding abrasion resistance and flexibility are required
- Application by brush and roller, in addition to spraying, may be necessary
- Application can be made at temperatures as low as 35°F
- Compliance with 2.1 lbs VOC regulations is required

COMPATIBILITY WITH OTHER COATINGS
- Imron 2.1 + reduced gloss qualities QM, QA & QF can be applied over other Axalta coatings including, but not limited to Imron Industrial Strength primers, other Imron primers, Imron Waterborne Polyurethane Copolymer coatings, Corlar® epoxies, Tufcote® acrylics, and Tufcote alkyd primers.
- Imron 2.1 + reduced gloss qualities QM, QA & QF may be used over most aged and hard-cured coatings in good condition. Testing for lifting, bubbling and adhesion is recommended to assure compatibility with unknown coatings. Contact your Axalta representative for specific recommendations.

NOT RECOMMENDED FOR
Immersion service or floors

PERFORMANCE PROPERTIES

Abrasion & Mechanical	Excellent
Alkalis	Excellent
Humidity	Excellent
Solvents	Excellent
Color & Gloss Retention	Excellent
Acids	Excellent
Salts	Excellent
Weather	Excellent

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

COLOR
Imron 2.1 + reduced gloss topcoats is a mixing system consisting of a binder, 2100P™, 19 tints and a mix quality color formula. Thousands of custom colors can be mixed in reduced gloss qualities semi gloss (QM), satin (QA) and flat (QF). Mix formulas are available in ColorNet®, and Acquire RX™ Systems.

Imron 2.1 + reduced gloss qualities are available as mixes only. All reduced gloss versions use 9T20™ Flattening Agent and must have an appropriately balanced color mix formula.

MIXING

COMPONENTS

Imron 2.1 SG™ + Semi Gloss ("QM" mix quality)	Mixing formulas available in ColorNet
Imron 2.1 ST™ + Satin Gloss ("QA" mix quality)	Mixing formulas available in ColorNet
Imron 2.1 FT™ + Flat ("QF" mix quality)	Mixing formulas available in ColorNet
2100P Color Mix Binder	1 gallon containers 100% full (128 oz.)
9T00-A™ Activator	quart container 80% full (25.6 oz.)
9T20 Flattening Agent	1 gallon container 100% full (128 oz.)

MIX RATIO

Component	**Part by Vol.**
Imron 2.1 + Reduced Gloss mix base	6
Imron 9T00-A Activator	1

ACTIVATION

To 6 parts Imron 2.1 + reduced gloss color mix formula, add one part Imron 9T00-A Activator. If using a mix formula, follow specific color formula for color desired. Measure out appropriate mounts, add activator and mix thoroughly. Use Y-32401™, 9M01™ or 9M02™ reducers as outlined in reduction section. Mix until uniform.

MIXING AND REDUCTION

Mix thoroughly using a mechanically powered sheer "Jiffy" mixer with variable RPM settings; use medium speed RPM. Move mixer up and down through paint for uniform mixing.

Agitate mixed color soon after weighing.

For spray use: Normally 0-2% Y-32401 and up to 8% Imron 9M01 (10% max), or 8-10% 9M01 can be used for spray application less than 85°F. For applications greater than 85°F, use 5% max Imron 9M02 and 5% max Imron 9M01. Y-32401 2% max can be used in place of 9M02.

For brush & roll use: Normally 0-2% Y-32401 and up to 8% Imron 9M01 (10% max), or 8-10% 9M01 can be used for brush and roll application less than 85°F. For applications greater than 85°F, use 5 % max Imron 9M02 and 5% max Imron 9M01. Y-32401 2% max can be used in place of 9M02. In addition, when rolling only, use 1 oz per mixed gallon of Imron 9M05 Rolling Additive to help eliminate bubbles. After addition of 9M05 Rolling Additive, allow 5 minutes induction before applying. If faster re-coats are required, use VG-805™ Accelerator, 1 oz per mixed gallon.

DO NOT USE Lacquer thinners for reduction. Use only recommended reduction solvents.

APPLICATION THINNERS

Spray, Brush and Roll – Below 85°F	Y-32401, 9M01
Spray, Brush and Roll – Above 85°F	Y-32401,9M02
Rolling Additive - Imron 9M05	

INDUCTION TIME

None unless 9M05 Rolling Additive is used, then 5 minute induction before applying.

POT LIFE

2 hours @ 77°F and 50% RH. Higher temperatures or the addition of Imron VG-805 Accelerator may shorten pot life.

APPLICATION

SURFACE PREPARATION
Newly primed surfaces should be clean and dry. If contaminated, detergent/water wash, then blow dry. Previously painted surfaces should have all loose paint removed and the edges feathered. Prime bare spots with appropriate primer.

APPLICATION CONDITIONS
Do not apply if the application surface temperature is below 45°F (7°C) or above 110°F (43°C), or if the atmospheric temperature is within 5°F of the dew point. For application temperatures below 45°F, the use of Imron VG-805 is recommended. Relative Humidity should be below 90%.

APPLICATION EQUIPMENT
- Apply by spray, brush or roll
- Manufacturers listed below are a guide. Others may be used. Changes in pressure and tip size may be required to achieve proper application.

ROLL
Manufacturer: Wooster® Pro/Doo-Z™ ¼" – ½" nap
- Add 1 oz./gallon Imron 9M05 Rolling Additive to eliminate bubbles. Craters may develop if you exceed 1 oz./gallon.
- Normally 0-2% Y-32401™ and up to 8% Imron® 9M01, (10% max) or 8-10% 9M01 can be used for roll application less than 85° F. For applications greater than 85°F, use 5% max Imron 9M02 and 5% max Imron 9M01. Y-32401 2% max can be used in place of 9M02.
- Material should be cross-rolled.
- For best results, allow 5 minutes mix time after adding 9M05.

BRUSH
Manufacturer: Wooster® China Bristle
- Normally 0-2% Y-32401 and up to 8% Imron 9M01, (10% max) or 8-10% 9M01 can be used for brush application less than 85° F. For applications greater than 85° F, use 5% max Imron 9M02 and 5% max Imron 9M01.
- Y-32401 2% max can be used in place of 9M02.
- Do not use 9M05 in spray applications.

CONVENTIONAL SPRAY
- May be recoated by spray when tack-free.
- Imron 9M05 Rolling Additive is not recommended for spray application.

Manufacturer	Model	Tip Size
Sata	K3 or K3 RP	1.0-1.3mm
Devilbiss	JGA, MBC	1.1-1.4mm
Graco	DeltaSpray XT	1.0-1.5mm
Iwata	W-77, W-71, or W-200	1.2-1.4mm
Binks	2001 or 95	1.2-1.3mm

HVLP SPRAY

Manufacturer	Model	Tip Size
Sata	3000RP HVLP	1.0-1.3mm
Devilbiss	JGVH, EXL, or FLG	1.1-1.4mm
Graco	DeltaSpray XT - HVLP	1.1-1.5mm
Iwata	LPH 200 L VLP	1.2-1.4mm
Binks	Mach 1 & 1SL	
	SV100 HVLP	1.2-1.4mm

AIRLESS SPRAY

Graco	Silver or Plus	Airless tip size .011 - .015	Pump 30:1 min
Iwata	ALG or Airlessco Guns	Airless Tip Size .011 - .015	Pump ALG 30:1 min
Binks	Airless 1	Airless Tip Size .011 - .017	Pump 30:1 min
Kremlin	Airless 250 II	Airless Tip Size .013 - .017	Pump Orca 32:1

- Fluid lines > ¼" ID are recommended for lengths up to 25', 3/8" ID or larger are required for proper
- fluid delivery at lengths longer than 25'.
- Minimum pressure: 2500-4500 psi.
- Filter 60 Mesh

Air Assisted Airless Spray		**Tip**	**Cap**
Graco	AA4000 HVLP	.021 - .027	AA10HP
	Alpha or Alpha Plus	.015 - .021	
Iwata	MSG 200 or 2000	Adjustable tip	
Binks	AA 1500	.013 - .019	

Electrostatic

Graco	PRO Xs3 or XS4 Electrostatic Gun
Nordson	Kinetix Systems AA, KVLP, & Conventional
Ransburg	REA 90 or AA90

Orifice Size in Inches (mm)

.031 (0.8)	.042 (1.0)	.043 (1.1)	.051 (1.3)
.055 (1.4)	.067 (1.7)	.070 (1.8)	.080 (2.0)

CLEAN UP THINNERS
Imron T-1021, Acetone or MEK

DRY TIMES

Cure Time At Recommended Thickness 1.5 - 2 mils

	77°F (25°C) and 50% RH		90°F (32°C) and <25% RH	
	2% Y-32401 Without VG-805	2% Y-32401 With 1 oz. VG-805	5% 9M02 Without VG-805	5% 9M02 With 1 oz. VG-805
Dry to Touch	3 hrs	1.5 hrs	2.5 hrs	1.5 hr
To Handle	7 hrs	4.5 hrs	7 hrs	4.5 hrs
To Recoat	5 hrs	3 hrs	5 hrs	3 hrs
Pot Life	2 hrs	1 hrs	2 hrs	1.5 hrs
Full Cure	7 days	6 days	6 days	5 days

Dry times can be improved by adding up to 1 oz. of VG-805 Accelerator per activated gallon.

If accelerators have been used, recoating must be done within 48 hours. If more time has elapsed, scuff sand to ensure adhesion.

PHYSICAL PROPERTIES

Maximum Service Temperature	250°F (93°C) in continuous service 300°F (148°C) in intermittent heat Some yellowing of light colors may occur at elevated temperatures.
Volume Solids	47% ± 2%
Weight Solids	52% ± 2%
Theoretical Coverage Per Gallon	754 ft² (18.4 m²/l) @ 1 mil dft 376 ft² (9.2 m²/l) @ 2 mil dft
	Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements
Weight Per Gallon	8 – 11 lbs - average varies with color

Shipping Weight (approximate)
1 gallon container: 11 lbs
Activator: quart: 2-3 lbs gallon: 12 lbs
Suggested Film Thickness 3 - 4 mils (75-100 µm) wet
1.5 – 2 mils (37 – 50 µm) dry
Application by brush and roller may require additional coats to achieve recommended films thickness.
Flash Point Between 20° to 73° F (-6° to 23° C)
Gloss
Imron 2.1 SG + Semi Gloss 50 - 65 measured @ 60° angle
Imron 2.1 ST + Satin Gloss 25 - 45 measured @ 60° angle
Imron 2.1 FT + Flat 0 - 10 measured @ 60° angle
Note: Imron 2.1 + reduced gloss formulas use 9T20 Flattener. Please also note that the mix ratio for reduced gloss qualities of Imron 2.1 +, changes from 3 to 1 with QH, High Gloss quality, to 6 to 1 with all reduced gloss qualities.
Shelf Life 12 months minimum

STORAGE CONDITIONS
Store in a dry, well-ventilated area. Storage conditions should be between 35°F (2°C) and 120°F (48°C).

Imron 2.1 + reduced gloss may settle. Best used upon mixing color. Shake before each use and periodically for less frequently used colors. Mix 9T20 Flattener frequently. Please consult MSDS for both products for proper protective equipment and safety and health information.

VOC REGULATIONS

VOC (Theoretical less water and exempt compounds).

Compliant at 2.1 lbs/gal VOC

	Normal			Hot		
	Less than 85°F	VOC lbs/gal	VOC TBAc Exempt	Higher than 85°F	VOC lbs/gal	VOC TBAc Exempt
+ Y-32401	2%	2.01	1.72	2%	2.01	1.72
+ 9M01	5%	2.01	1.73	5%	2.01	1.73
+ VG-805	1 oz /mixed gal	2.07	1.78	1 oz /mixed gal	2.07	1.79
+ 9M05	1 oz /mixed gal	2.08	1.80	1 oz / mixed gal	2.08	1.80
				Or instead of Y-32401		
+ 9M02	--	--	--	5%	1.99	1.71

This product contains T-Butyl Acetate (TBAc).

HAPS INFORMATION – THEORETICAL

	Normal		Hot	
	Less than 85°F	VOC lbs/gal	Higher than 85°F	VOC lbs/gal
+ Y-32401	2%	0.4	2%	0.4
+ 9M01	5%	0.4	5%	0.4
+ VG-805	1 oz /mixed gal	0.4	1 oz /mixed gal	0.4
+ 9M05	1 oz /mixed gal	0.4	1 oz / mixed gal	0.4
			Or instead of Y-32401	
+ 9M02	--	--	--	0.1

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for professional use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations, technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent.

Revised: January 2015

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1.855.6.AXALTA
axalta.us

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1.800.668.6945
axalta.ca

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SAFETY DATA SHEET

Date Prepared : 10/14/2015
MSDS No : SM5504
Date Revised : 10/14/2015
Revision No : 4

ACRYL-R SM5504 Acrylic Self-Leveling Sealant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ACRYL-R SM5504 Acrylic Self-Leveling Sealant

MANUFACTURER

ITW Polymers Sealants North America
111 South Nursery Road
Irving, TX 75060
Product Stewardship: (972) 438-9111

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424-9300

COMMENTS: ACRYL-R is a registered trademark of Illinois Tool Works, Inc.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2
Reproductive Toxicity, Category 2
Target Organ Toxicity (Single exposure), Category 3
Target Organ Toxicity (Repeated exposure), Category 2
Aspiration Hazard, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 2

Physical:

Flammable Liquids, Category 2

GHS LABEL

Flame

Health hazard

Exclamation mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H225: Highly flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H361: Suspected of damaging fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H401: Toxic to aquatic life.

PRECAUTIONARY STATEMENT(S)

Prevention:

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[201]: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash ... thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical advice/ attention.
P321: Specific treatment (see ... on this label).
P331: Do NOT induce vomiting.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P362: Take off contaminated clothing.
P370+P378: In case of fire: Use ... to extinguish.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P403+P235: Store in a well-ventilated place. Keep cool.
P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: DANGER! Extremely flammable liquid and vapor. Vapor may cause flash fire and explosion. Harmful or fatal if swallowed. Harmful if absorbed through the skin. Pulmonary aspiration hazard. After ingestion, may enter lungs and produce damage. High vapor concentrations may cause drowsiness. Can cause eye, skin and respiratory tract irritation.

POTENTIAL HEALTH EFFECTS

EYES: Can cause moderate to severe eye irritation with temporary damage possible.

SKIN: Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

INGESTION: Harmful or fatal if swallowed. Can cause gastrointestinal irritation with symptoms of nausea, vomiting and diarrhea.

INHALATION: Respiratory tract irritant. High concentrations may cause dizziness, headache, and anesthetic effects.

ROUTES OF ENTRY: Eye and Skin Contact, Inhalation and Ingestion

IRRITANCY: Eyes, nose, throat, respiratory tract, and skin irritation.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Toluene	40 - 50	108-88-3

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash or dispose of clothing before reuse.

INGESTION: Do not induce vomiting, keep person warm, quiet and get medical attention immediately. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Aspiration of this material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Liquid and vapor can severely irritate the eyes depending on type of exposure (splash, vapor) and exposure time.

SKIN: Mild to moderate skin irritant.

INGESTION: May cause vomiting.

INHALATION: Respiratory tract irriation. High concentration may cause dizziness, headache, and anesthetic effects.

ACUTE EFFECTS: High vapor concentrations may cause central nervous system (CNS) depression with symptoms including light headedness, giddiness, nausea, drowsiness, headache, nose, throat and respiratory tract irritation, reduced appetite, confusion and unconsciousness.

CHRONIC EFFECTS: Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumonitis (lung cavity) formation and chronic lung dysfunction.

Reports have associated repeated or prolonged occupational exposure to solvents with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

NOTES TO PHYSICIAN: Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Class IB

GENERAL HAZARD: Flammable liquid and vapor.

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Aldehydes

EXPLOSION HAZARDS: Avoid fire, sparks, static electricity and hot surfaces. Liquid readily evaporates at room/ambient temperature. Vapors are invisible, flammable, heavier than air, and may accumulate in low areas and spread long distances. Distant ignition and flashback are possible.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus with pressure-demand,

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full face piece SCBA (MSHA/NIOSH approved or equivalent) and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Likely to catch fire from near-by spark. Static charge may accumulate by flow or agitation. Grounding and bonding of containers is required.

SENSITIVITY TO IMPACT: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide may form when heated to decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitible vapors, have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Ventilate the area by natural means or by explosion proof mechanical means (i.e. fans). Know and prepare for spill response before using or handling this product. Eliminate all ignition sources (flames, hot surfaces, portable heaters and sources of electrical, static, or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools and appropriate PPE. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid run-off into storm drains, ditches and waterways.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. Flammable vapors may cause flash fire or ignite explosively. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Containers may be hazardous when empty. Never use welding or cutting torch on or near container. Do not cut, drill, grind, or expose containers to heat, sparks, static electricity or other source of ignition. Explosion may occur causing injury or death.

HANDLING: Use adequate ventilation and appropriate respiratory protection to avoid breathing vapors when cover is removed. Ground and bond all equipment when handling flammable solvent-borne material.

STORAGE: Keep container closed when not in use. Store in a dry well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container. Do not store in the same area with alcohols, amines, strong bases and surface active materials.

SHELF LIFE: 18 months from manufacture date @ 80 F (26.7 C)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		**ppm**	**mg/m³**	**ppm**	**mg/m³**
Toluene	**TWA**	200 ppm	NL	20 ppm	NL
	STEL	300 ppm [1]	NL [1]	NL [2]	NL [2]

Footnotes:
1. C = Ceiling
2. NL = Not Listed

ENGINEERING CONTROLS: Provide sufficient explosion proof mechanical (general and/or local exhaust) ventilation to maintain exposure below the occupational exposure limit and exposure concentration.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) or a full face respirator.

SKIN: Wear chemical protective clothing & boots to prevent repeated or prolonged skin contact. Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

PROTECTIVE CLOTHING: Wear chemical resistant gloves, such as nitrile rubber.

WORK HYGIENIC PRACTICES: Use good hygiene practices when handling this material. Wash hands thoroughly after use.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Viscous Liquid

ODOR: Aromatic

ODOR THRESHOLD: Not Determined

COLOR: Clear, White, Bronze or Aluminum

pH: Not Determined

PERCENT VOLATILE: 44.5

Notes: by weight

FLASHPOINT AND METHOD: 12.2°C (54°F) CC

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Notes: 3rd party tested on finished product

FLAMMABLE LIMITS: 1.2 to 7.1

Notes: (toluene)

AUTOIGNITION TEMPERATURE: (997°F)

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

BOILING POINT: 110.6°C (231°F)

FREEZING POINT: Not Determined

MELTING POINT: Not Determined

POUR POINT: Not Determined

SOLUBILITY IN WATER: Insoluble

PARTITION COEFFICIENT: N-OCTANOL/WATER: Not Determined

EVAPORATION RATE: > 1.0 (n-Butyl Acetate=1)

DENSITY: 8.46 lbs/gal

PARTICLE SIZE: Not Determined

SPECIFIC GRAVITY: 1.015

Notes: Average sg - 3rd party tested

VISCOSITY: Not Determined

MOLECULAR WEIGHT: Not Determined

(VOC): 443.400 gr/L EPA Method 24 VOC

OXIDIZING PROPERTIES: Not Determined

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid fire, sparks, static electricity and hot surfaces.

POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide may form when heated to decomposition.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, strong acids and strong bases.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)	INHALATION LC_{50} (rat)
Toluene	2600 to 7500 mg/kg	12124 mg/kg	8000 ppm (4-hr dose)

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CARCINOGENICITY

Chemical Name	IARC Status
Toluene	3

IRRITATION: Eyes, nose, throat, respiratory tract irritation.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

ECOTOXICOLOGICAL INFORMATION: Contains components that are potentially toxic to freshwater and saltwater ecosystems.

BIOACCUMULATION/ACCUMULATION: Contains components with the potential to bio-accumulate.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Adhesives
PRIMARY HAZARD CLASS/DIVISION: 3
UN/NA NUMBER: 1133
PACKING GROUP: II
NAERG: 128
MARINE POLLUTANT #1: None

VESSEL (IMO/IMDG)

SHIPPING NAME: Adhesives
UN/NA NUMBER: 1133
PRIMARY HAZARD CLASS/DIVISION: 3
PACKING GROUP: II
MARINE POLLUTANT #1: None

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

Flammable Liquid

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SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Toluene	40 - 50	108-88-3

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Toluene	40 - 50	1,000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Toluene	108-88-3

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Toluene	40 - 50	108-88-3

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Toluene	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical

CALIFORNIA PROPOSITION 65: This product contains toluene, a chemical known to the state of California to cause birth defects or other reproductive harm.

Chemical Name	Wt.%	Listed
Toluene	40 - 50	• Developmental Toxicity

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION

Flammable Liquid Toxic

16. OTHER INFORMATION

Date Revised: 10/14/2015

INFORMATION CONTACT: (972) 438-9111

REVISION SUMMARY: This MSDS replaces the 10/14/2015 MSDS. Revised: **Section 14:** DOT (DEPARTMENT

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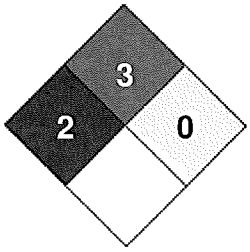
OF TRANSPORTATION) - UN/NA NUMBER.

HMIS RATING

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		B

NFPA CODES



GENERAL STATEMENTS: Keep out of reach of children
For professional or industrial use only
Sale to consumer is in violation of Federal Law

MANUFACTURER DISCLAIMER: This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

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Safety Data Sheet

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Document Group:	31-9449-5	**Version Number:**	2.01
Issue Date:	08/13/14	**Supercedes Date:**	05/23/14

SECTION 1: Identification

1.1. Product identifier
Premier PB938 Hi Performance Spray Adhesive, Bulk, Clr

1.2. Recommended use and restrictions on use

Recommended use
Adhesive

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Industrial Adhesives and Tapes Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

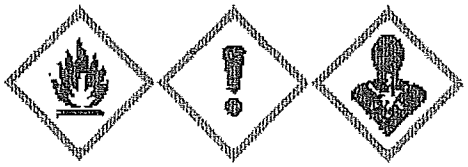
SECTION 2: Hazard identification

2.1. Hazard classification
Flammable Liquid: Category 2.
Serious Eye Damage/Irritation: Category 2A.
Skin Corrosion/Irritation: Category 2.
Aspiration Hazard: Category 1.
Reproductive Toxicity: Category 1B.
Specific Target Organ Toxicity (central nervous system): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements
Signal word
Danger

Symbols
Flame | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements
Highly flammable liquid and vapor.

Causes serious eye irritation.
Causes skin irritation.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure:
nervous system |
sensory organs |

Precautionary Statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

Response:
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF exposed or concerned: Get medical advice/attention.
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:
Keep cool.
Keep container tightly closed.
Store locked up in a well-ventilated place.

Disposal:

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Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

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2.3. Hazards not otherwise classified
None.

25% of the mixture consists of ingredients of unknown acute oral toxicity.
25% of the mixture consists of ingredients of unknown acute dermal toxicity.
25% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Acetone	67-64-1	15 - 40 Trade Secret *
Hexane	110-54-3	15 - 40 Trade Secret *
Non-hazardous ingredients (NJTS Reg. No. 04499600-7258)	Trade Secret*	10 - 25 Trade Secret *
Toluene	108-88-3	5 - 15 Trade Secret *
Heptane	142-82-5	5 - 15 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:
Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:
Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance	Condition
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Toluene	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
Toluene	108-88-3	CMRG	STEL:75 ppm	Skin Notation
Toluene	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
Hexane	110-54-3	ACGIH	TWA:50 ppm	Skin Notation
Hexane	110-54-3	OSHA	TWA:1800 mg/m3(500 ppm)	
Heptane	142-82-5	ACGIH	TWA:400 ppm;STEL:500 ppm	
Heptane	142-82-5	OSHA	TWA:2000 mg/m3(500 ppm)	
Acetone	67-64-1	ACGIH	TWA:500 ppm;STEL:750 ppm	A4: Not class. as human carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m3(1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.
Gloves made from the following material(s) are recommended: Fluoroelastomer

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Odor, Color, Grade:	Various colored liquid with solvent odor.
Odor threshold	*No Data Available*
pH	*No Data Available*
Melting point	*No Data Available*
Boiling Point	56 °C [*Details:* Acetone]
Flash Point	-4 °F [*Test Method:* Closed Cup] [*Details:* Acetone]
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	2.6 % volume
Flammable Limits(UEL)	12.8 % volume
Vapor Pressure	232 mmHg [@ 25 °C] [*Details:* Acetone]
Vapor Density	*No Data Available*
Density	0.85 g/ml
Specific Gravity	0.85 [*Ref Std:* WATER=1]
Solubility in Water	Moderate
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	465 °C
Decomposition temperature	*No Data Available*
Viscosity	*No Data Available*
Volatile Organic Compounds	49 % [*Test Method:* calculated SCAQMD rule 443.1]
VOC Less H2O & Exempt Solvents	680 g/l [*Test Method:* calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Heat

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

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11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

Skin Contact:
Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Eye Contact:
Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:
Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:
Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapor (4 hours)	Rat	LC50 76 mg/l
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Hexane	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hexane	Inhalation-Vapor (4 hours)	Rat	LC50 170 mg/l
Hexane	Ingestion	Rat	LD50 > 28,700 mg/kg
Heptane	Dermal	Rabbit	LD50 3,000 mg/kg
Heptane	Inhalation-Vapor (4 hours)	Rat	LC50 103 mg/l
Heptane	Ingestion	Rat	LD50 > 15,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
Toluene	Ingestion	Rat	LD50 5,550 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Acetone	Mouse	Minimal irritation
Hexane	Human and animal	Mild irritant
Heptane	Human	Mild irritant
Toluene	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Acetone	Rabbit	Severe irritant
Hexane	Rabbit	Mild irritant
Heptane		Moderate irritant
Toluene	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
Hexane	Human	Not sensitizing
Toluene	Guinea pig	Not sensitizing

Respiratory Sensitization

Name	Species	Value

Germ Cell Mutagenicity

Name	Route	Value
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hexane	In Vitro	Not mutagenic

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Hexane	In vivo	Not mutagenic
Heptane	In Vitro	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Acetone	Not Specified	Multiple animal species	Not carcinogenic
Hexane	Dermal	Mouse	Not carcinogenic
Hexane	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Acetone	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Acetone	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5.2 mg/l	during organogenesis
Hexane	Ingestion	Not toxic to development	Mouse	NOAEL 2,200 mg/kg/day	during organogenesis
Hexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	during gestation
Hexane	Ingestion	Toxic to male reproduction	Rat	NOAEL 1,140 mg/kg/day	90 days
Hexane	Inhalation	Toxic to male reproduction	Rat	LOAEL 3.52 mg/l	28 days
Toluene	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Human	NOAEL Not available	

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			classification			
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Hexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
Hexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL Not available	8 hours
Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24.6 mg/l	8 hours
Heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Acetone	Dermal	eyes	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart | liver	All data are negative	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	All data are negative	Rat	NOAEL 3,400 mg/kg/day	13 weeks

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Acetone	Ingestion	respiratory system	All data are negative	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	All data are negative	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin | bone, teeth, nails, and/or hair	All data are negative	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Hexane	Inhalation	peripheral nervous system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Hexane	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	LOAEL 1.76 mg/l	13 weeks
Hexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 months
Hexane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1.76 mg/l	6 months
Hexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 35.2 mg/l	13 weeks
Hexane	Inhalation	auditory system | immune system | eyes	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Hexane	Inhalation	heart | skin | endocrine system	All data are negative	Rat	NOAEL 1.76 mg/l	6 months
Hexane	Ingestion	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,140 mg/kg/day	90 days
Hexane	Ingestion	endocrine system | hematopoietic system | liver | immune system | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	13 weeks
Heptane	Inhalation	liver | nervous system | kidney and/or bladder	All data are negative	Rat	NOAEL 12 mg/l	26 weeks
Toluene	Inhalation	auditory system | nervous system | eyes | olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart | liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system | vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks

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Toluene	Ingestion	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 weeks

Aspiration Hazard

Name	Value
Hexane	Aspiration hazard
Heptane	Aspiration hazard
Toluene	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

SECTION 14: Transport Information

For Transport Information, please visit **http://3M.com/Transportinfo** or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact manufacturer for more information

311/312 Hazard Categories:

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Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
Hexane	110-54-3	15 - 40
Hexane (Hexane)	110-54-3	15 - 40
Toluene	108-88-3	5 - 15

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15.2. State Regulations
Contact manufacturer for more information

15.3. Chemical Inventories
The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact manufacturer for more information

15.4. International Regulations
Contact manufacturer for more information

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification
Health: 2 **Flammability:** 3 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier
Premier PB999 Gen Purpose Fast Dry Adhesive Cylinder

1.2. Recommended use and restrictions on use

Recommended use
Adhesive

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Industrial Adhesives and Tapes Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification
Flammable Liquid: Category 1.
Aspiration Hazard: Category 1.
Simple Asphyxiant.
Specific Target Organ Toxicity (central nervous system): Category 3.

2.2. Label elements
Signal word
Danger

Symbols
Flame | Exclamation mark | Health Hazard |

Pictograms

Hazard Statements
Extremely flammable liquid and vapor.

May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.
May displace oxygen and cause rapid suffocation.

Precautionary Statements

Prevention:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.

Response:
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell.
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:
Protect from sunlight.
Keep cool.
Keep container tightly closed.
Store locked up.
Store locked up in a well-ventilated place.

Disposal:
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified
None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Dimethyl Ether	115-10-6	30 - 60 Trade Secret *

Pentane	109-66-0	10 - 30 Trade Secret *
Non-Hazardous Components	Trade Secret*	10 - 30 Trade Secret *
Acetone	67-64-1	1 - 5 Trade Secret *
Nitrogen	7727-37-9	<= 3 Trade Secret *
Cyclopentane	287-92-3	< 2 Trade Secret *
Isopentane	78-78-4	< 2 Trade Secret *
Talc	14807-96-6	< 0.2 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:
Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:
Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes	During Combustion
Hydrocarbons	During Combustion
Methane	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Ketones	During Combustion
Toxic Vapor, Gas, Particulate	During Combustion

5.3. Special protective actions for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
For industrial or professional use only. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Pentane	109-66-0	OSHA	TWA:2950 mg/m3(1000 ppm)	
Pentane	109-66-0	ACGIH	TWA:1000 ppm	
Dimethyl Ether	115-10-6	AIHA	TWA:1880 mg/m3(1000 ppm)	
Dimethyl Ether	115-10-6	CMRG	TWA:1000 ppm	
Talc	14807-96-6	CMRG	TWA(as respirable dust):0.5 mg/m3	

Talc	14807-96-6	OSHA	TWA concentration(as total dust):0.3 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft.	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Cyclopentane	287-92-3	ACGIH	TWA:600 ppm	
Acetone	67-64-1	ACGIH	TWA:250 ppm;STEL:500 ppm	A4: Not class. as human carcin
Acetone	67-64-1	OSHA	TWA:2400 mg/m3(1000 ppm)	
Nitrogen	7727-37-9	ACGIH	Limit value not established:	simple asphyxiant
Isopentane	78-78-4	ACGIH	TWA:1000 ppm	
Non-Hazardous Components	Trade Secret	CMRG	TWA(as total dust):10 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Do not remain in area where available oxygen may be reduced. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Safety Glasses with side shields

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.
Gloves made from the following material(s) are recommended: Fluoroelastomer
Nitrile Rubber

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece supplied-air respirator
Organic vapor respirators may have short service life.

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Odor, Color, Grade:	Various colors solvent odor.
Odor threshold	*No Data Available*
pH	*No Data Available*
Melting point	*No Data Available*
Boiling Point	-25 °C
Flash Point	-41 °C [*Test Method:* Closed Cup]
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	3.4 % volume
Flammable Limits(UEL)	18 % volume
Vapor Pressure	*No Data Available*
Vapor Density	>=1.6 [*Ref Std:* AIR=1]
Density	0.68 - 0.72 g/ml
Specific Gravity	0.68 - 0.72 [*Ref Std:* AIR=1]
Solubility in Water	Nil
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	350 °C
Decomposition temperature	*No Data Available*
Viscosity	*No Data Available*
Hazardous Air Pollutants	0 % weight [*Test Method:* Calculated]
Volatile Organic Compounds	< 580 g/l [*Test Method:* calculated SCAQMD rule 443.1] [*Details:* EU VOC Value]
VOC Less H2O & Exempt Solvents	< 570 g/l [*Test Method:* calculated SCAQMD rule 443.1]
VOC Less H2O & Exempt Solvents	< 4.8 lb/gal [*Test Method:* calculated SCAQMD rule 443.1]
VOC Less H2O & Exempt Solvents	< 80 % [*Test Method:* calculated per CARB title 2]
Solids Content	> 20 %

SECTION 10: Stability and reactivity

10.1. Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Sparks and/or flames
Heat

10.5. Incompatible materials
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:
Intentional concentration and inhalation may be harmful or fatal.

Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:
Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin.

Eye Contact:
Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:
Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish colored skin (cyanosis), and may be fatal.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value

Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Dimethyl Ether	Inhalation-Gas (4 hours)	Rat	LC50 164,000 ppm
Pentane	Dermal	Rabbit	LD50 3,000 mg/kg
Pentane	Inhalation-Vapor (4 hours)	Rat	LC50 > 18 mg/l
Pentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Non-Hazardous Components	Inhalation-Dust/Mist (4 hours)	Multiple animal species	LC50 > 2.6 mg/l
Non-Hazardous Components	Dermal	Rabbit	LD50 > 3,160 mg/kg
Non-Hazardous Components	Ingestion	Rat	LD50 > 10,000 mg/kg
Acetone	Dermal	Rabbit	LD50 > 15,688 mg/kg
Acetone	Inhalation-Vapor (4 hours)	Rat	LC50 76 mg/l
Acetone	Ingestion	Rat	LD50 5,800 mg/kg
Nitrogen	Dermal		LD50 estimated to be > 5,000 mg/kg
Nitrogen	Inhalation-Gas		LC50 estimated to be > 50,000 ppm
Nitrogen	Ingestion		LD50 estimated to be > 5,000 mg/kg
Isopentane	Dermal	Rabbit	LD50 3,000 mg/kg
Isopentane	Inhalation-Vapor (4 hours)	Rat	LC50 > 18 mg/l
Isopentane	Ingestion	Rat	LD50 > 2,000 mg/kg
Cyclopentane	Inhalation-Vapor (4 hours)	Rat	LC50 > 25.3 mg/l
Cyclopentane	Ingestion	Rat	LD50 > 5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Pentane	Rabbit	Minimal irritation
Non-Hazardous Components	Human	Minimal irritation
Acetone	Mouse	Minimal irritation
Nitrogen	Professional judgement	No significant irritation
Isopentane	Rabbit	Minimal irritation
Cyclopentane	Rabbit	Minimal irritation
Talc	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Pentane	Rabbit	Mild irritant
Non-Hazardous Components	Rabbit	Mild irritant
Acetone	Rabbit	Severe irritant
Nitrogen	Professional judgement	No significant irritation
Isopentane	Rabbit	Mild irritant
Cyclopentane	Rabbit	Mild irritant
Talc	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Pentane	Guinea pig	Not sensitizing
Non-Hazardous Components	Guinea pig	Not sensitizing
Isopentane	Guinea pig	Not sensitizing

Respiratory Sensitization

Name	Species	Value
Talc	Human	Not sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Dimethyl Ether	In Vitro	Not mutagenic
Dimethyl Ether	In vivo	Not mutagenic
Pentane	In vivo	Not mutagenic
Pentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Non-Hazardous Components	In Vitro	Not mutagenic
Non-Hazardous Components	In vivo	Not mutagenic
Acetone	In vivo	Not mutagenic
Acetone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Isopentane	In vivo	Not mutagenic
Isopentane	In Vitro	Some positive data exist, but the data are not sufficient for classification
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Dimethyl Ether	Inhalation	Rat	Not carcinogenic
Acetone	Not Specified	Multiple animal species	Not carcinogenic
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Dimethyl Ether	Inhalation	Not toxic to development	Rat	NOAEL 40,000 ppm	during organogenesis
Pentane	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
Pentane	Inhalation	Not toxic to development	Rat	NOAEL 30 mg/l	during organogenesis
Acetone	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,700 mg/kg/day	13 weeks
Acetone	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5.2 mg/l	during organogenesis
Isopentane	Ingestion	Not toxic to development	Rat	NOAEL 1,000	during

				mg/kg/day	organogenesis
Isopentane	Inhalation	Not toxic to development	Rat	NOAEL 30 mg/l	during organogenesis
Talc	Ingestion	Not toxic to development	Rat	NOAEL 1,600 mg/kg	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Dimethyl Ether	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 10,000 ppm	30 minutes
Dimethyl Ether	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 100,000 ppm	5 minutes
Pentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
Pentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
Pentane	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	not available
Pentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	not available
Acetone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Acetone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 hours
Acetone	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	
Acetone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Isopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
Isopentane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
Isopentane	Inhalation	cardiac sensitization	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	not available
Isopentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	not available
Cyclopentane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL Not available	
Cyclopentane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Dimethyl Ether	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25,000 ppm	2 years
Dimethyl Ether	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 20,000 ppm	30 weeks
Pentane	Inhalation	peripheral nervous system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Pentane	Inhalation	heart | skin | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | liver | immune system | muscles | nervous system | eyes | kidney and/or bladder | respiratory system	All data are negative	Rat	NOAEL 20 mg/l	13 weeks
Pentane	Ingestion	kidney and/or bladder	All data are negative	Rat	NOAEL 2,000 mg/kg/day	28 days
Non-Hazardous Components	Ingestion	blood	All data are negative	Rat	NOAEL 2,500 mg/kg/day	90 days
Acetone	Dermal	eyes	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	3 weeks
Acetone	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 3 mg/l	6 weeks
Acetone	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL 1.19 mg/l	6 days
Acetone	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL 119 mg/l	not available
Acetone	Inhalation	heart | liver	All data are negative	Rat	NOAEL 45 mg/l	8 weeks
Acetone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	13 weeks
Acetone	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	13 weeks
Acetone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,896 mg/kg/day	14 days
Acetone	Ingestion	eyes	All data are negative	Rat	NOAEL 3,400 mg/kg/day	13 weeks
Acetone	Ingestion	respiratory system	All data are negative	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Acetone	Ingestion	muscles	All data are negative	Rat	NOAEL 2,500 mg/kg	13 weeks
Acetone	Ingestion	skin | bone, teeth, nails, and/or hair	All data are negative	Mouse	NOAEL 11,298 mg/kg/day	13 weeks
Isopentane	Inhalation	peripheral nervous system	Some positive data exist, but the data are not sufficient for	Human	NOAEL Not available	occupational exposure

			classification			
Isopentane	Inhalation	heart | skin | endocrine system | bone, teeth, nails, and/or hair | hematopoietic system | liver | immune system | muscles | nervous system | eyes | kidney and/or bladder | respiratory system	All data are negative	Rat	NOAEL 20 mg/l	13 weeks
Isopentane	Ingestion	kidney and/or bladder	All data are negative	Rat	NOAEL 2,000 mg/kg/day	28 days
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis | respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 18 mg/m3	113 weeks

Aspiration Hazard

Name	Value
Pentane	Aspiration hazard
Isopentane	Aspiration hazard
Cyclopentane	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations
Contact manufacturer for more information
311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

15.2. State Regulations
Contact manufacturer for more information

15.3. Chemical Inventories
The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact manufacturer for more information

15.4. International Regulations
Contact manufacturer for more information

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification
Health: 2 **Flammability:** 4 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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Issue Date:	10/29/15	**Supercedes Date:**	07/10/14

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STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Version 1, August 2010

Facility Wide Potential to Emit Emission Inventory

Application Template and Instructions

For new stationary sources provide the facility's potential to emit for all NSR Regulated Air Pollutants. The potential to emit provided here must match the emissions rates which are requested to be permitted.

For modifications to existing facilities (including the addition of new emissions units), if the existing facility classification is in question an existing facility wide potential to emit emission inventory will be required to be submitted[1]. Contact DEQ to determine if a facility wide emission inventory for the existing facility is required.

All emissions inventories must be submitted with thorough documentation. The emission inventories will be subjected to technical review. Therefore, prepare your application with sufficient documentation so that the public and DEQ can verify the validity of the emission estimates. **Applications submitted without sufficient documentation are incomplete. Follow the instructions provided on page 2; do not proceed until you have read the instructions.**

Applicants must use the Potential to Emit Summary table provided below.

Table 1. POTENTIAL TO EMIT FOR NSR REGULATED POLLUTANTS

Emissions Unit	PM_{10}	SO_2	NOx	CO	VOC	Lead
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources						
Prime Booth (EP1)	0.08945	0.00	0.00	0.00	60.120	0.00
Paint Booth (EP2)	0.02236	0.00	0.00	0.00	15.031	0.00
Paint Booth (EP3)	0.02236	0.00	0.00	0.00	15.031	0.00
Paint Booth (EP4)	0.02236	0.00	0.00	0.00	15.031	0.00
Paint Booth (EP5)	0.02236	0.00	0.00	0.00	15.031	0.00
Booth Heaters	0.16894	0.013	2.089	0.889	0.122	0.0000111
Caulking	0.00	0.00	0.00	0.00	30.378	0.00
Fugitive Sources *(For listed source categories only, see item 3 below in the instructions)*						
XXX	0.00	0.00	0.00	0.00	0.00	0.00
XXX	0.00	0.00	0.00	0.00	0.00	0.00
XXX	0.00	0.00	0.00	0.00	0.00	0.00
Totals	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

a) NSR Regulated air Pollutants are defined[2] as: Particulate Matter (PM, PM-10, PM-2.5), Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone (VOC), Sulfur Dioxide, CO_2e[3], Green House Gases (GHG) mass, all pollutants regulated by NSPS (40 CFR 60)(i.e. TRS, fluoride, sulfuric acid mist) & Class I & Class II Ozone Depleting Substances (40 CFR 82)(i.e. CFC, HCFC, Halon, etc.)

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[1] The applicant must determine if the existing facility is a major facility. If the facility is an existing PSD major facility and changes are being made to the facility the major modification test must be conducted.

[2] 40 CFR 52.21(b)(50), as incorporated by reference at IDAPA 58.01.01.107.03.d

[3] Multiply each green house gas (GHG) by the global warming potential (GWP) listed at 40 CFR 98, Table A- 1 of Subpart A then sum all values to determine CO_2e (GHGs are carbon dioxide, nitrous oxide, methane, hydrofluorcarbons, perfluorcarbons, sulfur hexafluoride). Be sure to show all calculations as described in the instructions.

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.**Emission Inventory Instructions:**

1. Use the same emission unit name throughout the application (i.e. in air pollution control equipment forms and for modeling purposes).

2. The application must **show in detail all calculations** used to develop the PTE summary and include:

   - Electronic copies of any spreadsheets used to estimate emissions. If a spreadsheet is used submit an electronic copy of the spread sheet (i.e. Excel File).
   - Documentation of all calculations conducted by hand (i.e. show all calculations).
   - Clear statements on all assumptions relied upon in estimating emissions.
   - Documentation of the emissions factors used to estimate emissions. If the emissions factor documentation is readily available to DEQ, such as an EPA AP-42 emissions factor, a simple reference to the emissions factor suffices. If the emissions factor documentation is not readily available to DEQ the applicant must submit the documentation with the application; ask DEQ if you are uncertain. **Applications without sufficient documentation are incomplete.** Documentation may consist of manufacturer guarantees, research conducted by trade organizations, published emission factors, and source test results. **If there are multiple factors for a given operation, note why the factor used is the most representative.**
   - Copies of manufacturer guarantees upon which emission inventories are based.
   - The best available emission information (see DEQ's Guidance on Emission Data Hierarchy).
   - If source tests are used as the basis for emissions estimates the source test report must be submitted. If the source test report is on file with DEQ provide the date of the source test was submitted along with the name of the facility and the emission unit that was tested. Source data from similar emissions units may be considered reliable provided it is clearly described why the sources are similar. Similar sources are those that the applicant has shown serve a similar function, use similar raw materials, and have similar processing rates.

3. Fugitive emissions of NSR regulated air pollutants from the source categories listed below must be included in the emission inventory.

Listed Source Categories for Inclusion of Fugitive Emissions

- Coal cleaning plants (with thermal dryers)
- Kraft pulp mills
- Portland cement plants
- Primary zinc smelters
- Iron and steel mills
- Primary aluminum ore reduction plants
- Primary copper smelters
- Municipal incinerators -250 T/day of refuse
- Hydrofluoric, sulfuric, or nitric acid plants
- Petroleum refineries
- Lime plants
- Phosphate rock processing plants
- Coke oven batteries
- Sulfur recovery plants
- Carbon black plants (furnace process)
- Primary lead smelters
- Fuel conversion plants
- Sintering plants
- Secondary metal production plants
- Chemical process plants (excluding ethanol plants by natural fermentation).
- Fossil-fuel fired boilers totaling more than 250 MMBtu/hr
- Petroleum storage and transfer units with total capacity of 300,000 barrels
- Taconite ore processing plants
- Glass fiber processing plants
- Charcoal production plants
- Fossil fuel-fired steam electric plants greater than 250 MMBtu/hr)
- Categories regulated by NSPS or NESHAP prior to 8/7/80

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Version 2, January 2011

Ambient Impact Assessment Emission Inventory for New Minor Facilities and Minor Modifications

Application Template and Instructions

New Minor Facilities or Minor Modifications to Existing Facilities

Applicants must demonstrate that the source will not cause or significantly contribute to a violation of an ambient air quality standard for criteria pollutants[1]. As described in the State of Idaho Air Quality Modeling Guideline, there are three methods that an applicant can use to demonstrate compliance:

Method 1. Demonstrate that emissions from the new and/or modified existing facility are below air quality modeling thresholds that are listed in the State of Idaho Air Quality Modeling Guideline.

Method 2. Demonstrate that emissions from the new and/or modified source will not cause ambient impacts at or above significant ambient impact levels (Significant Impact Analysis or Preliminary Analysis).

Method 3. Demonstrate that facility wide emissions, when combined with co-contributing sources and background levels, do not cause an exceedance of ambient standards (Cumulative Analysis).

The type of emission inventory required depends upon which method is used to demonstrate compliance. In the following pages the type of emission inventory that is required to be submitted is discussed for each method. DEQ strongly recommends that the applicant develop and submit for DEQ approval a written modeling protocol prior to submitting the application (refer to the State of Idaho Air Quality Modeling Guideline). The modeling protocol must address what types of emission inventories are required for modeling, and address which fugitive emissions must be included.

All modeling emission inventories must be summarized using the emission inventory summary table provided below (Table 1).

The applicant must document all emission calculations and follow the emission inventory instructions provided. **Applications without sufficient documentation are incomplete; do not proceed until you have read the instructions on page 6.**

[1] Rules for the Control of Air Pollution in Idaho (IDAPA 58.01.01.203 & 403)

Table 1 Emission Increase/Proposed Emissions (pick the appropriate header for the specific purpose after reading the instructions)

Emissions Unit	Stack ID[a]	PM_{10}	$PM_{2.5}$		SO_2		NO_x		CO		Lead	
		lb/hr 24-hr Avg.	lb/hr 24-hr Avg.	lb/hr Annual Avg.	lb/hr Max.	lb/hr 3-hr Avg.	lb/hr Max.	lb/hr Annual Avg.	lb/hr Max.	lb/hr 8-hr Avg.	lb/hr monthly Avg.	lb/hr 1/4ly Avg.
Point Sources												
Prime Booth	EP1	0.02124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paint Booth	EP2	0.00531	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paint Booth	EP3	0.00531	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paint Booth	EP4	0.00531	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paint Booth	EP5	0.00531	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Booth Heaters		0.03857	0.0	0.0	0.003	0.003	0.4771	0.4771	0.2030	0.2030	0.0000025	0.0000025
Fugitive Sources												
XXX	F01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XXX	F02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
XXX	F03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

a) Stack or Emissions Point ID must match the ID used in the air dispersion model.

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.

Following are descriptions of the types of emission inventories that are required for each of the three methods that can be used to demonstrate that the source will not cause or significantly contribute to a violation of ambient air quality standards for criteria pollutants. These descriptions are also covered in the State of Idaho Air Quality Modeling Guideline. The following descriptions are intended to be general guidelines that apply to the vast majority of situations. Even though they cover the vast majority of situations they are not intended to act in place of a DEQ approved modeling protocol that is developed based on consideration of site specific emissions units and air pollution dispersion characteristics.

Method 1

Demonstrate that emissions from the new and/or modified existing facility are below air quality modeling thresholds that are listed in the State of Idaho Air Quality Modeling Guideline.

New facilities

Calculate proposed allowable, or potential to emit, of all new emissions units. "All" emissions units includes those units that would have otherwise qualified for an exemption (do not omit any sources).

Provide an emission inventory summary table for proposed allowable emissions using the template provided above.

Modified Facilities

New Emission Units (including Replacement units) – This includes new units that are replacing existing emission units.

Calculate the proposed allowable emissions, or potential to emit, of all new emissions units. "All" emissions units includes those units that would have otherwise qualified for an exemption (do not omit any sources).

The emission reduction associated with removal of an existing emission unit will not typically be considered in the evaluation of whether emissions exceed modeling thresholds. Prior written DEQ approval is necessary for any emission reduction to be credited in evaluation of whether emissions exceed modeling thresholds.

Provide an emission inventory summary table for proposed allowable emissions using the template provided.

Modified Existing Non-permitted Emission Units – Non-permitted means those emission units not included in a PTC or Tier II operating permit. The emissions units that must be included are all of the emissions units that are part of the project. ***Project*** means a physical change in, or change in the method of operation of, an existing stationary source. **Sources not being physically modified but which could experience emissions increases that result from the change[2, 3] are required to be included in the project.**

For emission units that air pollution dispersion characteristics do not change (i.e. stack height, diameter, flow rate, temperature), calculate the emission increase as the difference of proposed allowable emissions and actual emissions. Actual emissions shall be calculated using the units actual operating hours, production rates, types of materials processed, stored, or combusted during the two during a two year period prior to submitting the application. Actual emissions should represent normal source operations, DEQ may grant written approval of a different time period provided it is demonstrated that it is more representative of normal source operation.

For emission units that air pollution dispersion characteristics do change, comparison to the modeling threshold should be based on the total allowable emissions rate of the modified source.

Provide an emission inventory summary table for proposed allowable emissions using the template provided. For emission units that air pollution dispersion characteristics do not change also provide an emission inventory summary table for actual emissions and emission increase.

Modified Existing Permitted Emission Units – Permitted means those units included in a PTC or Tier II operating permit.

For emission units that air pollution dispersion characteristics do not change (i.e. stack height, diameter, flow rate, temperature), calculate the emission increase as the difference of proposed allowable emissions and the previous allowable emissions.

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[2] David Neleigh, Chief, Air Permits Section EPA Region 6. Letter to Dawson Lasseter, Air Quality Division, Oklahoma DEQ, January 27, 2005.

[3] R. Douglas Neeley, Chief, Air & Radiation Technology Section, Letter to Rs. Rhonda Banks Thompson, South Carolina Department of Health and Environmental Control, March 14, 1997 ("... when a particular physical change or change in the method of operation would cause an increase in emissions from other emissions units, then those "other" emissions must be included in determining PSD applicability for the particular change.")

For emission units that air pollution dispersion characteristics do change, comparison to the modeling threshold should be based on the total allowable emissions rate of the modified source.

Provide an emission inventory summary table for proposed allowable emissions and the emissions increase using the template provided. For emission units that air pollution dispersion characteristics do not change also provide an emission inventory summary table for existing allowable emissions.

Method 2

Demonstrate that emissions from the new and/or modified source will not cause ambient impacts at or above significant ambient impact levels (Significant Impact Analysis or Preliminary Analysis).

New Facilities

Calculate proposed allowable emissions, or potential to emit, of all new emissions units. "All" emissions units includes those units that would have otherwise qualified for an exemption (do not omit any sources). Model the emission rate(s) following a DEQ approved Modeling Protocol and determine if a significant impact occurs.

Modified Facilities

New Emission Units (including Replacement units) – This includes new units that are replacing existing emission units.

Calculate proposed allowable emissions, or potential to emit, of all new emissions units. "All" emissions units includes those units that would have otherwise qualified for an exemption (do not omit any sources).

Calculate the emission reduction associated with removal of an existing emission unit.

- For existing permitted emission units the reduction is equal to the permitted emission rate or the potential to emit. Permitted means those units included in a PTC or Tier II operating permit.
- For existing non-permitted emission units the reduction is based on actual emission of the unit. Actual emissions shall be calculated using the units actual operating hours, production rates, types of materials processed, stored, or combusted during a two during a two year period prior to submitting the application. Actual emissions should represent normal source operations, DEQ may grant written approval of a different time period provided it is demonstrated that it is more representative of normal source operation.

Model the emission rate(s) following a DEQ approved Modeling Protocol and determine if a significant impact occurs. Shutdown emission units are typically modeled as negative emission rates.

Modified Existing Non-permitted Emission Units – Non-permitted means those units not included in a PTC or Tier II operating permit. The emissions units that must be included are all of the emissions units that are part of the project. ***Project*** means a physical change in, or change in the method of operation of, an existing stationary source. **Sources not being physically modified but which could experience emissions increases that result from the change[4, 5] are required to be included in the project.**

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[4] David Neleigh, Chief, Air Permits Section EPA Region 6. Letter to Dawson Lasseter, Air Quality Division, Oklahoma DEQ, January 27, 2005.

For emission units that air pollution dispersion characteristics do not change (i.e. stack height, diameter, flow rate, temperature), calculate the emission increase as the difference of proposed allowable emissions and actual emissions. Actual emissions shall be calculated using the units actual operating hours, production rates, types of materials processed, stored, or combusted during a two during a two year period prior to the modification. Actual emissions should represent normal source operations, DEQ may grant written approval of a different time period provided it is demonstrated that it is more representative of normal source operation. Provide the proposed allowable, actual emissions and emission increase using the template provided.

For emission units that air pollution dispersion characteristics do change, modeling is based on the total allowable emissions rate of the modified source. Provide the proposed allowable emissions rates using the template provided. Model the emission rate(s) following a DEQ approved Modeling Protocol and determine if a significant impact occurs.

Modified Existing Permitted Emission Units – Permitted means those units included in a PTC or Tier II operating permit.

For emission units that air pollution dispersion characteristics do not change (i.e. stack height, diameter, flow rate, temperature), calculate the emission increase as the difference of proposed allowable emissions and the previous allowable emissions. Provide the proposed allowable emissions rates, previous allowable emission rates, and emission increase using the template provided.

For emission units that air pollution dispersion characteristics do change, modeling should be based on the total allowable emissions rate of the modified source. Provide the proposed allowable emissions rates using the template provided.

Model the emission rate(s) following a DEQ approved Modeling Protocol and determine if a significant impact occurs.

Method 3

Demonstrate that facility wide emissions, when combined with co-contributing sources and background levels, do not cause an exceedance of ambient standards (Cumulative Analysis).

Calculate proposed allowable emissions of all emissions units. All emissions units includes those units that would have otherwise qualified for an exemption if they were the only unit being constructed (do not omit any sources). Provide the proposed allowable emissions rates using the template provided. Model the emission rate(s) following a DEQ approved Modeling Protocol, add the appropriate background concentration value, and determine if violation of a standard occurs.

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[5] R. Douglas Neeley, Chief, Air & Radiation Technology Section, Letter to Rs. Rhonda Banks Thompson, South Carolina Department of Health and Environmental Control, March 14, 1997 ("... when a particular physical change or change in the method of operation would cause an increase in emissions from other emissions units, then those "other" emissions must be included in determining PSD applicability for the particular change.")

Modeling Emission Inventory Instructions:

1. Use the same emission unit name throughout the application (i.e. in air pollution control equipment forms and for modeling purposes).

2. The application must **show in detail all calculations** used to develop the PTE summary and include:
   - Electronic copies of any spreadsheets used to estimate emissions. If a spreadsheet is used submit an electronic copy of the spread sheet (i.e. Excel File).
   - Documentation of all calculations conducted by hand (i.e. show all calculations).
   - Clear statements on all assumptions relied upon in estimating emissions.
   - Documentation of the emissions factors used to estimate emissions. If the emissions factor documentation is readily available to DEQ, such as an EPA AP-42 emissions factor, a simple reference to the emissions factor suffices. If the emissions factor documentation is not readily available to DEQ the applicant must submit the documentation with the application; ask DEQ if you are uncertain. **Applications without sufficient documentation are incomplete.** Documentation may consist of manufacturer guarantees, research conducted by trade organizations, published emission factors, and source test results. **If there are multiple factors for a given operation, note why the factor used is the most representative.**
   - Copies of manufacturer guarantees upon which emission inventories are based.
   - The best available emission information (see DEQ's Guidance on Emissions Data Hierarchy).
   - If source tests are used as the basis for emissions estimates the source test report must be submitted. If the source test report is on file with DEQ provide the date of the source test was submitted along with the name of the facility and the emission unit that was tested. Source data from similar emissions units may be considered reliable provided it is clearly described why the sources are similar. Similar sources are those that the applicant has shown serve a similar function, use similar raw materials, and have similar processing rates.

3. **Input to the computer model must match the emission inventory in the summary table(s).** Additionally, the emissions inventory calculations that are submitted must also match the summary table. It would seem that this could go without saying, **but there are a surprising number of applications received where emission calculations do not match the input to the computer model.** DEQ recommends that the applicant print the emission inventory input file in the model and compare it to this summary table (this is one of the first things that DEQ will check during the completeness review). If the inventories do not match the application is incomplete.

4. DEQ highly recommends that a written modeling protocol be submitted for approval prior to conducting modeling. The modeling protocol should address which fugitive emissions must be included. Idaho's Air Quality Modeling Guideline states the following types of fugitive emissions sources should be included:

   > "**Process fugitive emissions from material handling, processing, etc.**
   >
   > Fugitive emissions from vehicle traffic on facility roadways and wind erosion emissions from storage piles will not typically be considered for minor source permitting unless DEQ determines such sources may have a substantial contribution."

5. The applicant must complete the Modeling Information Workbook (Form MI) to provide other modeling input parameters.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Version 1, August 2010

Toxic Air Pollutant Emissions Inventory

Application Template and Instructions

Applicants must demonstrate preconstruction compliance with toxic air pollutant (TAP) standards contained in IDAPA 58.01.01.210 (*Rules for the Control of Air Pollution in Idaho*). DEQ has developed a TAP completeness checklist in order to assist applicants. DEQ strongly recommends that applicants complete and submit this checklist as part of the application. **Applications which do not follow one of the available methods for demonstrating compliance described in the checklist will be determined incomplete or denied.** Follow this link to the checklist: Toxic Air Pollutant Application Completeness Checklist. Be sure to calculate emissions correctly for the averaging periods as described in the checklist and in the instructions on page 3.

The type of TAP emissions inventory required depends upon which method is used to demonstrate compliance (see the Toxic Air Pollutant Application Completeness Checklist). **All TAP emissions inventories must be summarized using the emissions inventory summary tables provided below** (Table 1 and Table 2).

The applicant must **document all emission calculations as described in the instructions provided on the following page. Applications without sufficient documentation are incomplete; do not proceed until you have read the instructions.**

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.

Table 1. PRE- AND POST PROJECT NON-CARCINOGENIC TAP EMISSIONS SUMMARY
POTENTIAL TO EMIT

Non-Carcinogenic Toxic Air Pollutants (sum of all emissions)	Pre-Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Post Project 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Change in 24-hour Average Emissions Rates for Units at the Facility (lb/hr)	Non-Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
1,2,4 Trimethyl Benzene	0	0.34989	0.34989	8.2	No
Aluminum	0	0.00424	0.00424	0.667	No
Chromic Acid	0	0.00002	0.00002	NA	No
Cobalt Octoate	0	0.00000	0.00000	0.007	No
Cumene	0	0.01781	0.01781	16.3	No
Ethylbenzene	0	0.09317	0.09317	29	No

Methanol	0	0.60745	0.60745	17.3	No
Methyl Isobutyl Ketone	0	0.01171	0.01171	13.7	No
N-Butyl Alcohol	0	0.59509	0.59509	10	No
Naphthalene	0	0.00074	0.00074	3.33	No
Naphthenic Acid	0	0.00001	0.00001	NA	No
Toluene	0	1.08506	1.08506	25	No
Xylene	0	0.38837	0.38837	29	No
Zinc Oxide	0	0.00073	0.00073	0.333	No
Zinc Phosphate	0	0.15650	0.15650	NA	No
Acetone	0	0.00644	0.00644	119	No
Hexane	0	0.00164	0.00164	12	No
Heptane	0	0.00062	0.00062	109	No
Pentane	0	0.02877	0.02877	118	No
Cyclopentane	0	0.00192	0.00192	118	No

Table 2. PRE- AND POST PROJECT CARCINOGENIC TAP EMISSIONS SUMMARY POTENTIAL TO EMIT

Carcinogenic Toxic Air Pollutants (sum of all emissions)	Pre-Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Post Project Annual Average Emissions Rates for Units at the Facility (lb/hr)	Change in Annual Average Emissions Rates for Units at the Facility (lb/hr)	Carcinogenic Screening Emission Level (lb/hr)	Exceeds Screening Level? (Y/N)
XXX *{586 listed TAP}*[a]	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**
XXX *{586 listed TAP}*	**0.00E-03**	**0.00E-03**	**0.0000**	**XXX**	**Yes/No**

a) *{If you have POM include the following footnote.}* Polycyclic Organic Matter (POM) is considered as one TAP comprised of: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3-cd)pyrene, benzo(a)pyrene. The total is compared to benzo(a)pyrene.

Pre-project average emissions are the existing allowable emission rates.

Post-project average emissions are the new proposed emission rates.

Emission Inventory Instructions:

1. The averaging period for the emission rate depends upon whether the TAP is non-carcinogenic or carcinogenic. Non-carcinogenic TAP emissions are averaged over 24 hours, carcinogenic TAP emissions are averaged over 8760 hours.

   For more explanation on averaging periods, see the Toxic Air Pollutant Application Completeness Checklist.

2. **Pre**-project average emissions are the existing allowable emission rates.

   Post-project average emissions are the new proposed emission rates.

3. Use the same emission unit name/designation throughout the application (i.e. air pollution control equipment forms and modeling forms).

4. The emission inventories will be subjected to technical review; prepare your application with sufficient documentation so that the public and DEQ can verify the validity of the emission estimates. The application must **show in detail all emission calculations** used to develop the emission inventory summary and must include the following:

   - **Clear documentation of any emissions averaging that was used.** For instance if a source only operates 8 hours during any day and the emissions during that 8 hour period are averaged over 24 hours then this must be clearly described in the application. The emissions averaging calculations must also be shown.
   - Electronic copies of any spreadsheets used to estimate emissions. If a spreadsheet is used submit an electronic copy of the spread sheet (i.e. Excel File).
   - Documentation of all calculations conducted by hand (i.e. show all calculations).
   - Clear statements on all assumptions relied upon in estimating emissions.
   - Documentation of the emissions factors used to estimate emissions. If the emissions factor documentation is readily available to DEQ, such as an EPA AP-42 emissions factor, a simple reference to the emissions factor suffices. If the emissions factor documentation is not readily available to DEQ the applicant must submit the documentation with the application; ask DEQ if you are uncertain. **Applications without sufficient documentation are incomplete.** Documentation may consist of manufacturer guarantees, research conducted by trade organizations, published emission factors, and source test results. **If there are multiple factors for a given operation, note why the factor used is the most representative.**
   - Copies of manufacturer guarantees upon which emission inventories are based.
   - The best available emission information (see DEQ's Guidance on Emissions Data Hierarchy).
   - If source tests are used as the basis for emissions estimates the source test report must be submitted. If the source test report is on file with DEQ provide the date of the source test was submitted along with the name of the facility and the emission unit that was tested. Source test data from similar emissions units may be considered reliable provided it is clearly described why the sources are similar. Similar sources are those that the applicant has shown serve a similar function, use similar raw materials, and have similar processing rates.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Version 1, August 2010

Facility Wide Hazardous Air Pollutant Potential to Emit
Application Template and Instructions

Provide the facility wide potential to emit for all Hazardous Air Pollutants (HAPs). **The potential to emit provided here must match the emissions rates which are requested to be permitted.**

HAPs are pollutants that are required to be regulated under the Clean Air Act. A list of the HAPs may be found by following this link: HAP list; review the list carefully to be sure you have included all listed HAPs.

All emissions inventories must be submitted with thorough documentation. The emission inventories will be subjected to technical review; prepare your application with sufficient documentation so that either the public or DEQ can verify the validity of the emission estimates. **Applications submitted without sufficient documentation are incomplete. Follow the instructions provided on the following page; do not proceed until you have read the instructions.**

Applicants must use the Potential to Emit Summary table provided below. Identify the individual HAP with the highest emissions and total HAP emissions. The potential to emit provided here must match the emissions rates which are requested to be permitted. **All fugitive emissions of HAPs must be included.**

Table X HAP POTENTIAL TO EMIT EMISSIONS SUMMARY

HAP Pollutants	PTE (T/yr)
Cumene	0.078
Ethylbenzene	0.4081
Methanol	2.66065
Methyl Isobutyl Ketone	0.0513
Naphthalene	0.00325
Toluene	4.75255
Xylene	1.70105
Total	9.6621

* Maximum Individual HAP

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.

Emission Inventory Instructions:

1. Use the same emission unit name throughout the application (i.e. in air pollution control equipment forms and for modeling purposes).

2. The application must **show in detail all calculations** used to develop the PTE summary and include:

   - Electronic copies of any spreadsheets used to estimate emissions. If a spreadsheet is used submit an electronic copy of the spread sheet (i.e. Excel File).
   - Documentation of all calculations conducted by hand (i.e. show all calculations).
   - Clear statements on all assumptions relied upon in estimating emissions.
   - Documentation of the emissions factors used to estimate emissions. If the emissions factor documentation is readily available to DEQ, such as an EPA AP-42 emissions factor, a simple reference to the emissions factor suffices. If the emissions factor documentation is not readily available to DEQ the applicant must submit the documentation with the application; ask DEQ if you are uncertain. **Applications without sufficient documentation are incomplete.** Documentation may consist of manufacturer guarantees, research conducted by trade organizations, published emission factors, and source test results. **If there are multiple factors for a given operation, note why the factor used is the most representative.**
   - Copies of manufacturer guarantees upon which emission inventories are based.
   - The best available emission information (see DEQ's Guidance on Emissions Data Hierarchy).
   - If source tests are used as the basis for emissions estimates the source test report must be submitted. If the source test report is on file with DEQ provide the date of the source test was submitted along with the name of the facility and the emission unit that was tested. Source data from similar emissions units may be considered reliable provided it is clearly described why the sources are similar. Similar sources are those that the applicant has shown serve a similar function, use similar raw materials, and have similar processing rates.

2. **All fugitive emissions of HAPs must be included[1].**

[1] November 27, 2001 (66 FR 59161), EPA published a rule, "Change to Definition of Major Source," that requires the fugitive emissions of all hazardous air pollutants ("HAPs") listed under section 112(b) of the Act in determining whether the source is a major source.

Department of Environmental Quality - Air Quality Division
Exemption Criteria and Reporting Requirements for Toxic Air Pollutant (TAP) Emissions Checklist

This checklist is designed to assist in documenting that a facility qualifies and complies with the *Exemption Criteria and Reporting Requirements for Toxic Air Pollutants*, IDAPA 58.01.01.223.

☒ Refer to the Rule. Read the *Exemption Criteria and Reporting Requirements for Toxic Air Pollutant Emissions,* IDAPA 58.01.01.223 (Section 223), Rules for the Control of Air Pollution in Idaho (Rules).

General Information

☒ Fugitive toxic air pollutant emissions shall not be considered in determining whether a source meets the applicable exemption criteria. A list of toxic air pollutants is given in Rules Section 585 and 586.

☒ Toxic air pollutants are regulated in accordance with Rules Section 210 only from emission units constructed or modified on or after July 1, 1995.

☒ Record Retention. In accordance with Rules Section 220 the source shall maintain documentation on site which shall identify the exemption determined to apply to the source and verify that the source qualifies for the identified exemption. Documentation shall be kept for the life of the source (but not less than five years) or until a permit to construct or operating permit is issued which covers operation of the source.

☒ Annual Report. Facilities that have exempted toxic air pollutant emissions in accordance with a Level I, Level II, or Level III exemption shall submit a report labeled "Toxic Air Pollutant Exemption Report" by May 1 each year for exemptions claimed during the previous 12 month period. The report shall state the date construction has or will commence and shall include copies of all exemption determinations by the owner or operator for Level I, Level II, or Level III exemptions (Rules Section 223.05).

Below Regulatory Concern (BRC) Exemption (Rules Section 223.01)

☒ Calculate the uncontrolled emissions (Rules Section 210.05) of each toxic air pollutant from new emissions units. Uncontrolled emission rates are emissions at maximum capacity without the effect of physical or operational limitations. See Quantification of Emission Rates (Rules Section 210.02). Show calculations and state all assumptions.

☐ Calculate the increase of TAP emissions from modified emissions units. Show calculations and state all assumptions. The increase in TAP emissions from modified emission units which are aggregated and compared to the exemption criteria is determined by subtracting the potential to emit the TAP before the modification from the uncontrolled potential to emit after the modification. In conducting this analysis please note the following for TAP emission increase determinations:

- Uncontrolled emission rates after the modification are emissions at maximum capacity without the effect of physical or operational limitations.
- When determining the emissions increase from existing permitted emissions units the emission rate before the modification is equivalent to the TAP emission limits contained in the permit or,if there no emission limits in the permit, by determining what the emission rate is under the physical or operational limitations contained in the permit.
- The emission increase determination for TAPs described above only applies to determine what emissions increases are for comparing to the TAP exemption thresholds. This method shall not be used to determine if a modification will occur. Emissions increases for modifications are determined in accordance with IDAPA 58.01.01.006.63 and IDAPA 58.01.01007.04 (projected actual emissions are subtracted from baseline actual emissions to determine if an emissions increase will occur for modification determinations).

- Questions often arise regarding polyaromatic hydrocarbons as they are listed in Rules Section 586 of the Rules. The following two points are provided for clarification.

  1) The following group of 7 PAH's shall be combined and considered as one TAP equivalent in potency to benzo(a)pyrene:

     Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a, h) anthrancene, chrysene, indeno(1,2,3,-cd) pyrene, benzo (a) pyrene

  2) All other PAH's are considered as a single pollutant and the emission of each is compared to the PAH increment listed in Rules Section 586.

☒ Aggregate the uncontrolled emissions increase of each TAP from new and modified emissions units.

☒ The source qualifies for a BRC exemption if the uncontrolled emission increase for all toxic air pollutants is less than or equal to 10% of the screening emission levels (EL) listed in Rules Section 585 & 586.

Level I Exemption (Rules Section 223.02)

☐ The uncontrolled emission rate from all new and modified emissions units shall be less than the applicable screening emission levels (EL) listed in Rules Section 585 & 586; or the uncontrolled ambient concentration for all toxic air pollutants shall be less than the applicable ambient concentration increment listed in Rules Sections 585 & 586. Calculate and document the uncontrolled emission rate from new and modified sources as described above.

☐ Aggregate the uncontrolled emissions increase of each TAP from new and modified emissions units.

☐ The source qualifies for a Level I exemption if the aggregated uncontrolled emissions from the new and modified emission units is less than or equal to all applicable screening emission levels (EL) listed in Rules Section 585 and 586.

☐ Model the uncontrolled emissions for each TAP from new emissions units and the increase in emissions from all modified emissions units. Refer to Quantification of Ambient Concentrations (Rules Section 210.03) and the State of Idaho Air Quality Modeling Guideline (http://www.deq.idaho.gov/air/data_reports/publications.cfm#model). Maintain electronic input, output, and BIPinput modeling files.

☐ The source qualifies for a Level I exemption if the uncontrolled ambient concentration from each new and modified emission unit is less than or equal to all applicable acceptable ambient concentration increments listed in Rules Section 585 and 586.

Level II and Level III Exemptions (Rules Sections 223.03 & 223.04)

☐ A stationary source may choose to document a Level II or Level III exemption. However Level II and Level III exemption criteria are more stringent than Level I exemption criteria. Consequently there is little practical use for these levels of exemptions. Therefore, this checklist does not detail Level II or Level III exemption criteria.

PM10 and VOC Emmissions for Trails West Manufacturing Facility #2

Spray Gun Efficency 65% Filter Efficency 99.7%

PRODUCT	Gallon Weight	Solids Wt%	Weight Solids per Gallon (lbs/gal)	Annual Max Gallons Used	Annual Max Solids Used (lbs)	Hours Operated per Year	Max Usage (gal/hr)	PM10 Emmisions (lb/hr)[a]	PM10 Emissions (tons/year)	Amount VOC per gallon (lbs)	Total VOC (lbs)	VOC Emissions (lb/hr)[b]	VOC Emissions (tons/year)
106	6.78	0.14	0.01	**3922**	37.23	2,080	1.89	0.00002	0.00002	4.4	17,256.80	8.30	8.63
130	0.00	29.30	0.00	**25**	0.00	2,080	0.01	0.00000	0.00000	0.0	0.00	0.00	0.00
131S	58.55	67.11	39.29	**12**	471.51	2,080	0.01	0.00024	0.00025	4.6	55.20	0.03	0.03
15303S	8.81	66.00	5.81	**490**	2,849.15	2,080	0.24	0.00144	0.00150	1.5	735.00	0.35	0.37
15305S	8.72	66.00	5.76	**1350**	7,769.52	2,080	0.65	0.00392	0.00408	1.5	2,025.00	0.97	1.01
15307S	8.79	66.00	5.80	**525**	3,045.74	2,080	0.25	0.00154	0.00160	1.5	787.50	0.38	0.39
15309S	9.25	80.00	7.40	**185**	1,369.00	2,080	0.09	0.00069	0.00072	0.0	0.00	0.00	0.00
15385S	7.02	0.00	0.00	**248**	0.00	2,080	0.12	0.00000	0.00000	4.1	1,016.80	0.49	0.51
15395S	6.95	0.00	0.00	**60**	0.00	2,080	0.03	0.00000	0.00000	4.2	252.00	0.12	0.13
15397S	6.92	0.00	0.00	**24**	0.00	2,080	0.01	0.00000	0.00000	4.1	98.40	0.05	0.05
189S	8.14	0.27	0.02	**67.5**	1.48	2,080	0.03	0.00000	0.00000	8.1	546.75	0.26	0.27
19301S	7.35	7.21	0.53	**8**	4.24	2,080	0.00	0.00000	0.00000	6.7	53.60	0.03	0.03
226S	8.37	1.01	0.08	**2**	0.17	2,080	0.00	0.00000	0.00000	0.0	0.00	0.00	0.00
22806S	6.71	3.84	0.26	**18**	4.64	2,080	0.01	0.00000	0.00000	5.6	100.80	0.05	0.05
22880S	8.17	20.34	1.66	**28**	46.53	2,080	0.01	0.00002	0.00002	1.1	30.80	0.01	0.02
2350S	8.02	57.00	4.57	**1.5**	6.86	2,080	0.00	0.00000	0.00000	3.4	5.10	0.00	0.00
29077151	13.85	75.59	10.47	**0.24**	2.51	2,080	0.00	0.00000	0.00000	3.6	0.86	0.00	0.00
359S	7.99	25.01	2.00	**15.625**	31.22	2,080	0.01	0.00002	0.00002	6.0	93.75	0.05	0.05
3602S	6.64	0.00	0.00	**12**	0.00	2,080	0.01	0.00000	0.00000	5.4	64.80	0.03	0.03
389S	8.14	0.72	0.06	**8**	0.47	2,080	0.00	0.00000	0.00000	8.1	64.80	0.03	0.03
3900S	6.49	0.00	0.00	**495**	0.00	2,080	0.24	0.00000	0.00000	6.5	3,217.50	1.55	1.61
45P7241	0.00	65.49	0.00	**5550**	0.00	2,080	2.67	0.00000	0.00000	0.0	0.00	0.00	0.00
45PN0001	0.00	53.57	0.00	**72**	0.00	2,080	0.03	0.00000	0.00000	0.0	0.00	0.00	0.00
7899E	7.78	31.31	2.44	**8**	19.49	2,080	0.00	0.00001	0.00001	5.2	41.60	0.02	0.02
825P30018	11.80	67.99	8.02	**5800**	46,532.36	2,080	2.79	0.02349	0.02443	3.2	18,560.00	8.92	9.28
48PN5636LG	8.88	49.62	4.41	**506**	2,229.57	2,080	0.24	0.00113	0.00117	2.7	1,366.20	0.66	0.68
8989S	8.17	5.00	0.41	**13.5**	5.51	2,080	0.01	0.00000	0.00000	7.8	105.30	0.05	0.05
936S	7.28	38.25	2.78	**12**	33.42	2,080	0.01	0.00002	0.00002	1.7	20.40	0.01	0.01
937S	7.65	54.83	4.19	**1310**	5,494.79	2,080	0.63	0.00277	0.00288	3.3	4,323.00	2.08	2.16
938S	7.75	54.79	4.25	**70**	297.24	2,080	0.03	0.00015	0.00016	3.4	238.00	0.11	0.12
946S	7.76	61.31	4.76	**305**	1,451.09	2,080	0.15	0.00073	0.00076	2.1	640.50	0.31	0.32
A-4115S	6.85	10.57	0.72	**25.2**	18.25	2,080	0.01	0.00001	0.00001	3.3	83.16	0.04	0.04
A	7.96	33.00	2.63	**2**	5.25	2,080	0.00	0.00000	0.00000	4.7	9.40	0.00	0.00
EX	8.67	59.20	5.13	**357**	1,832.35	2,080	0.17	0.00092	0.00096	3.3	1,178.10	0.57	0.59
EZ	10.23	57.40	5.87	**855**	5,020.58	2,080	0.41	0.00253	0.00264	3.3	2,821.50	1.36	1.41
F	7.91	57.90	4.58	**1**	4.58	2,080	0.00	0.00000	0.00000	5.0	5.00	0.00	0.00
LF-64034P	9.39	62.97	5.91	**288**	1,702.91	2,080	0.14	0.00086	0.00089	3.5	1,008.00	0.48	0.50
PT196	8.81	48.84	4.30	**68**	292.59	2,080	0.03	0.00015	0.00015	2.9	197.20	0.09	0.10
QA	10.15	47.00	4.77	**72**	343.48	2,080	0.03	0.00017	0.00018	1.4	100.80	0.05	0.05
Total				**22,811.57**	**80,923.71**			**0.04085**	**0.04248**		**57,103.62**	**27.45**	**28.55**

a = PM10 Emissions Formula: Solid Content (lbs/gal) * Max Usage (gal/hr) * (1-Spray Gun Efficency) * (1- Filter Efficency)
b = VOC Emissions Formula: Solid Content (lbs/gal) * Max Usage (gal/hr) Assumes 100% Vocs Emitted

Trails West Manufacturing Facilty #2- Booth Heaters Emissions

Product	Rated Heat Input (Mmbtu/hr)	Hours Operated per year	PM_{10} Emission Factor (lb/MMBtu)[a]	PM_{10} Hourly Emissions (lb/hr)	PM_{10} Yearly Emissions (tons/year)	SO_2 Emission Factor (lb/MMBtu)[a]	SO_2 Hourly Emissions (lb/hr)	SO_2 Yearly Emissions (tons/year)
Prime Booth Heater	1.075	8,760	0.0076	0.00817	0.03578	0.0006	0.0006	0.003
Paint Booth Heater #1	2.000	8,760	0.0076	0.01520	0.06658	0.0006	0.0012	0.005
Paint Booth Heater #2	2.000	8,760	0.0076	0.01520	0.06658	0.0006	0.0012	0.005
Total				0.03857	0.16894		0.0030	0.013

Product	Rated Heat Input (Mmbtu/hr)	Hours Operated per year	NO_x Emission Factor (lb/MMBtu)[a]	NO_x Hourly Emissions (lb/hr)	NO_x Yearly Emissions (tons/year)	CO Emission Factor (lb/MMBtu)[a]	CO Hourly Emissions (lb/hr)	CO Yearly Emissions (tons/year)
Prime Booth Heater	1.075	8,760	0.0940	0.1011	0.443	0.0400	0.0430	0.188
Paint Booth Heater #1	2.000	8,760	0.0940	0.1880	0.823	0.0400	0.0800	0.350
Paint Booth Heater #2	2.000	8,760	0.0940	0.1880	0.823	0.0400	0.0800	0.350
Total				0.4771	2.089		0.2030	0.889

Product	Rated Heat Input (Mmbtu/hr)	Hours Operated per year	VOC Emission Factor (lb/MMBtu)[a]	VOC Hourly Emissions (lb/hr)	VOC Yearly Emissions (tons/year)	Pb Emission Factor (lb/MMBtu)[a]	Pb Hourly Emissions (lb/hr)	Pb Yearly Emissions (tons/year)
Prime Booth Heater	1.075	8,760	0.0055	0.0059	0.026	0.0000005	0.0000005	0.0000024
Paint Booth Heater #1	2.000	8,760	0.0055	0.0110	0.048	0.0000005	0.0000010	0.0000044
Paint Booth Heater #2	2.000	8,760	0.0055	0.0110	0.048	0.0000005	0.0000010	0.0000044
Total				0.0279	0.122		0.0000025	0.0000111

a: Based on AP-42 Table 1.4-2(7/98) for PM_{10}, SO_2, VOC, and Pb and AP-42 Table 1.4-1(7/98) for NO_x and CO

Trails West Manufacturing Facilty #2- Caulking Operation VOCs

Product	Amount VOC Per Gallon(lbs)	Max Annual Used (Gallons)	Max Annual Total VOC (lbs)	Hours Operated	VOC Emissions (lb/hr)	VOC Emissions (tons/year)
Acryl-R Joint sealer	3.70	2,745.0	10,156.500	2,080	4.883	5.078
3M PB938 Adhesive	5.67	36.0	204.120	2,080	0.098	0.102
3M PB999 Adhesive	4.84	840.0	4,065.600	2,080	1.955	2.033
Total		3,621.0	14,426.220		6.936	7.213

Uncontrolled emissions rate of Toxic Air Pollutants (TAP) for Trails West Manufacturing Facility #2

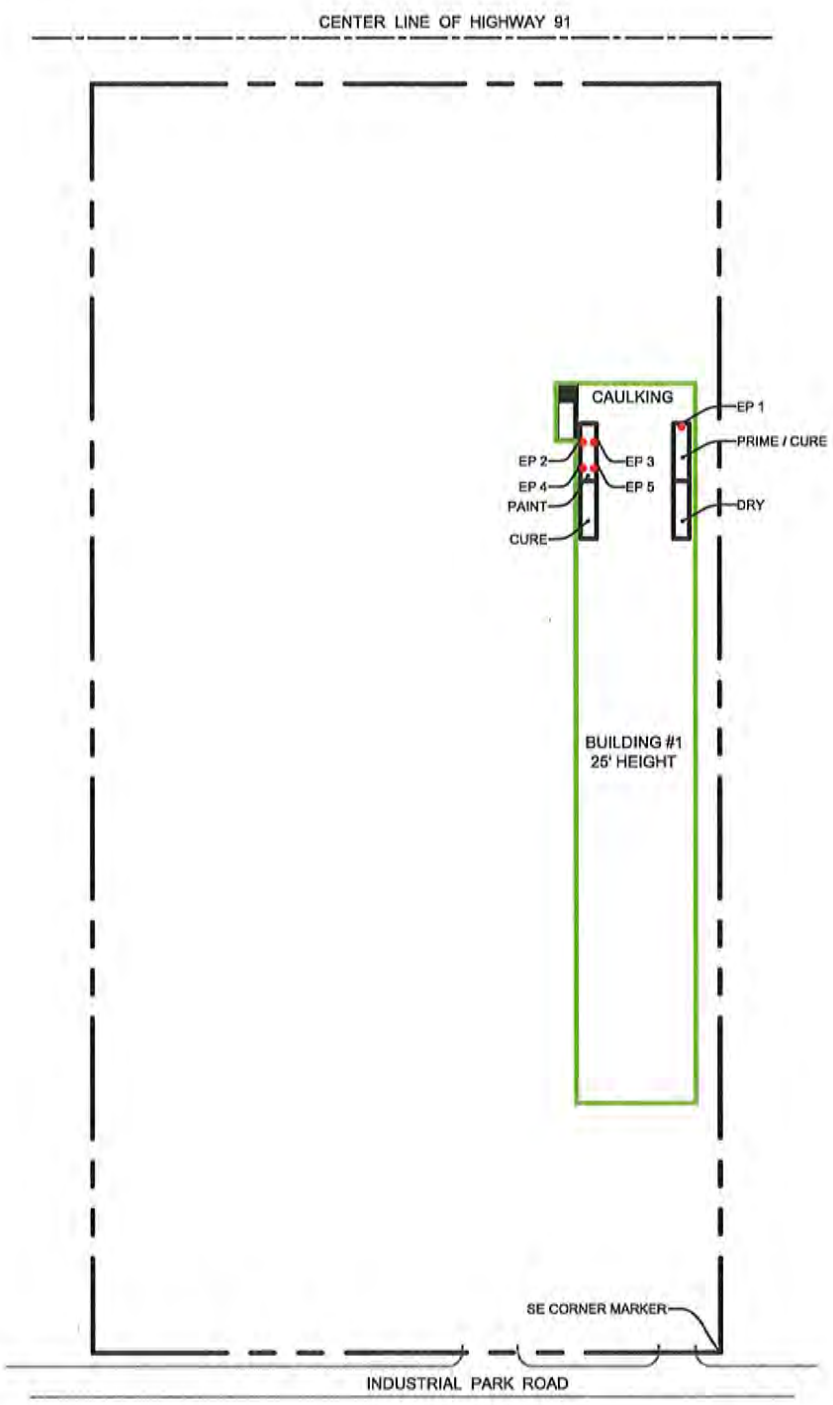
TAP	Maximum TAP Used (lb)	Hours per Year (hr)	Uncontrolled Emmision Rate 24-Hour Average[a] (lb/hr)	Idaho TAP Screening Emission Level (lb/hr)	Percentage of Screening Level
Painting					
1,2,4 Trimethyl Benzene	3,065.0	8,760	0.34989	8.2	4.27%
Aluminum	37.1	8,760	0.00424	0.667	0.63%
Chromic Acid	0.2	8,760	0.00002	NA	NA
Cobalt Octoate	0.02	8,760	0.00000	0.007	0.03%
Cumene *	156.0	8,760	0.01781	16.3	0.11%
Ethylbenzene *	816.2	8,760	0.09317	29	0.32%
Methanol *	5,321.3	8,760	0.60745	17.3	3.51%
Methyl Isobutyl Ketone *	102.6	8,760	0.01171	13.7	0.09%
N-Butyl Alcohol	5,213.0	8,760	0.59509	10	5.95%
Naphthalene *	6.5	8,760	0.00074	3.33	0.02%
Naphthenic Acid	0.1	8,760	0.00001	NA	NA
Toluene *	8,127.2	8,760	0.92776	25	3.71%
Xylene *	3,402.1	8,760	0.38837	29	1.34%
Zinc Oxide	6.4	8,760	0.00073	0.333	0.22%
Zinc Phosphate	1,370.9	8,760	0.15650	NA	NA
Caulking					
Toluene *	1,377.9	8,760	0.15729	25	0.63%
Acetone	56.4	8,760	0.00644	119	0.01%
Hexane *	14.4	8,760	0.00164	12	0.01%
Heptane	5.4	8,760	0.00062	109	0.00%
Pentane	252.0	8,760	0.02877	118	0.02%
Cyclopentane	16.8	8,760	0.00192	118	0.00%

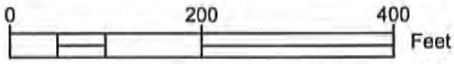
a Uncontrolled Emmision Rate Calculation: Maximum Tap Used/Hours Per Year
Assumes 100 Percent Emission Factor.
* Material is identified as as hazardous air pollutant (HAP)

Uncontrolled emissions rate of Hazardous Air Pollutants (HAP) for Trails West Manufacturing Facility #2

HAP	Maximum TAP Used (lb)	Hours per Year (hr)	Uncontrolled Emmision Rate 24-Hour Average[a] (lb/hr)	Uncontrolled Emmision Rate 24-Hour Average (Tons/year)
Cumene	156.0	8,760	0.01781	0.078
Ethylbenzene	816.2	8,760	0.09317	0.4081
Methanol	5,321.3	8,760	0.60745	2.66065
Methyl Isobutyl Ketone	102.6	8,760	0.01171	0.0513
Naphthalene	6.5	8,760	0.00074	0.00325
Toluene	9,505.1	8,760	1.08506	4.75255
Xylene	3,402.1	8,760	0.38837	1.70105
Hexane	14.4	8,760	0.00164	0.0072
Total				**9.6621**

a Uncontrolled Emmision Rate Calculation: Maximum Tap Used/Hours Per Year
Assumes 100 Percent Emission Factor.





LEGEND

- EMISSION POINT
- BUILDING EDGE
- PROPERTY LINE

Facility
Trails West Manufacturing
Facility #2
950 West Industrial Park Road
Preston, ID 83263

PROJECT NO.:	1992
DATE:	03/10/2016
DRAWN BY:	SD
PREPARED BY:	DL
REVISION NO.:	

BIO-WEST
www.bio-west.com
435.752.4202

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Trails West Manufacturing of Idaho, Inc.
Facility Name:	Trails West Manufacturing Facility #2
Facility ID No.:	Have not received one.
Brief Project Description:	Seeking permit to construct for two paint booths at a trailer manufacturing facility.

SUMMARY OF AIR IMPACT ANALYSIS RESULTS - CRITERIA POLLUTANTS

		1.		2.	3.	4.		5.
Criteria Pollutants	**Averaging Period**	**Significant Impact Analysis Results (µg/m3)**	**Significant Contribution Level (µg/m3)**	**Full Impact Analysis Results (µg/m3)**	**Background Concentration (µg/m3)**	**Total Ambient Impact (µg/m3)**	**NAAQS (µg/m3)**	**Percent of NAAQS**
PM_{10}	24-hour	47.73	5	47.73	85.00	132.43	150	88%
	Annual	6.53	1	6.53	24.40	30.93	50	62%
SO_2	3-hr		25				1300	
	24-hr		5				365	
	Annual		1				80	
NO_2	Annual		1				100	
CO	1-hr		2000				10000	
	8-hr		500				40000	

Instructions for Form MI1

This form is designed to provide the air quality modeler with a summary of the air impact analysis results for the criteria pollutants. This information will be used by IDEQ to determine compliance demonstration with the national ambient air quality standards (NAAQS).

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

Significant Impact Analysis - Evaluates the emissions increase from the proposed project only. This analysis determines whether or not a proposed project has a significant impact on ambient air, and therefore, requires a full impact analysis.

Full Impact Analysis - Only required if the significant impact analysis exceeds the significant contribution level - evaluates the emissions from the facility, including the emissions increase from the proposed project. This analysis determines whether the facility, with the emissions increase, complies with the NAAQS.

1. Provide the results of the significant impact analysis in $\mu g/m^3$.
2. Provide the results of the full impact analysis in $\mu g/m^3$ (if required).
3. List the background concentration in mg/m3. Contact the Stationary Source Modeling Coordinator at (208) 373-0502 for the current background concentrations for the area of interest. (Not needed if full impact analysis is not required.)
4. Provide the total ambient impact in mg/m3. The total ambient impact is the sum of the background concentration and the full impact analysis result.
5. Calculate the percent of the NAAQS that the total ambient impact analysis represents.

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 3/27/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Trails West Manufacturing of Idaho, Inc.
Facility Name:	Trails West Manufacturing Facility #2
Facility ID No.:	Have not Received one.
Brief Project Description:	Seeking permit to construct for two paint booths at a trailer manufacturing facility.

POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	**Stack ID**	**UTM Easting (m)**	**UTM Northing (m)**	**Base Elevation (m)**	**Stack Height (m)**	**Modeled Diameter (m)**	**Stack Exit Temperature (K)**	**Stack Exit Flowrate (acfm)**	**Stack Exit Velocity (m/s)**	**Stack orientation (e.g., horizontal, rain cap)**
Point Source(s)										
Prime/Cure Booth	EP1	425702.89	4662321.02	0	8.50	0.86	297.04	18,000.00	14.50	Vertical, Rain Cap
Paint Booth	EP2	425669.76	4662313.11	0	8.20	0.86	297.04	14,000.00	11.28	Vertical, Rain Cap
Paint Booth	EP3	425680.68	4662312.99	0	8.20	0.86	297.04	14,000.00	11.28	Vertical, Rain Cap
Paint Booth	EP4	425668.42	4662296.52	0	8.20	0.86	297.04	14,000.00	11.28	Vertical, Rain Cap
Paint Booth	EP5	425680.49	4662295.82	0	8.20	0.86	297.04	14,000.00	11.28	Vertical, Rain Cap
(insert more rows as needed)										

Instructions for Form MI2

This form is designed to provide the air quality modeler with information on the stack characteristics of each point source located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.
2. Provide the identification number for the stack which the emission unit exits.
3. Provide the UTM locations for each point source. The UTM Easting and UTM Northing are the coordinates for the center of the point source.
4. Provide the elevation of the base of the stack. This elevation must be calculated by the same method as the buildings and receptor elevation.
5. Provide the height of the stack, from the ground.
6. Provide the stack diameter that is included in the modeling analysis. Refer to the State of Idaho Modeling Guideline for guidance on developing the appropriate diameter.
7. Provide the stack exit temperature. Include documentation and justification for the exit temperature used.
8. Provide the stack exit flowrate. Include documentation and justification for the exit flowrate used.
9. Provide the stack exit velocity. Include documentation and justification for the exit velocity used.
10. Provide the orientation of the stack (horizontal or vertical). Indicate whether there is an obstruction on the stack, such as a raincap.

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	
Facility Name:	
Facility ID No.:	
Brief Project Description:	

FUGITIVE SOURCE PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	**Stack ID**	**UTM Easting (m)**	**UTM Northing (m)**	**Base Elevation (m)**	**Release Height (m)**	**Easterly Length (m)**	**Northerly Length (m)**	**Angle from North (°)**	**Initial Vertical Dimension (m)**	**Initial Horizontal Dimension (m)**
Area Source(s)										
name of the emissions unit1										
name of the emissions unit2										
name of the emissions unit3										
name of the emissions unit4										
name of the emissions unit5										
name of the emissions unit6										
name of the emissions unit7										
name of the emissions unit8										
name of the emissions unit9										
name of the emissions unit10										
Volume Source(s)										
name of the emissions unit11										
name of the emissions unit12										
name of the emissions unit13										
name of the emissions unit14										
name of the emissions unit15										
name of the emissions unit16										
name of the emissions unit17										
name of the emissions unit18										
name of the emissions unit19										
(insert more rows as needed)										

Instructions for Form MI3

This form is designed to provide the air quality modeler with information on the characteristics of each fugitive source located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

Fugitive sources are typically modeled as either area or volume sources. Area sources are used to model fugitives from sources such as roads or parking lots, while volume sources are typically used to model fugitives from piles. Refer to the State of Idaho Air Quality Modeling Guideline for additional guidance on modeling fugitive sources.

1. Provide the name of the fugitive source. This name should match names used on other submittals to IDEQ and within this application.
2. Provide the identification number for the fugitive source.
3. Provide the UTM locations of the fugitive source. The UTM Easting and UTM Northing are the coordinates for the center of the fugitive source.
4. Provide the elevation of the base of the fugitive source. This elevation must be calculated by the same method as the buildings and receptor elevation.
5. Provide the height of the fugitive source, from the ground. This is used for an elevated release. If the fugitive source is at ground level enter zero.
6. Provide the easterly length of the fugitive source.
7. Provide the northly length of the fugitive source.
8. Provide the angle from north, in degrees. This allows for accurate evaluation of the alignment of the fugitive source.
9. Provide the initial vertical dimension of the fugitive source. Refer to the State of Idaho Modeling Guideline for guidance on estimating this value.
10. Provide the initial horizontal dimension of the fugitive source. This parameter is only used for volume sources. Refer to the State of Idaho Modeling Guideline for guidance on estimating this value.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Trails West Manufacturing of Idaho, Inc.
Facility Name:	Trails West Manufacturing Facility #2
Facility ID No.:	Have not received one.
Brief Project Description:	Seeking permit to construct for two paint booths at a trailer manufacturing facility.

BUILDING AND STRUCTURE INFORMATION

1.	2.	3.	4.	5.	6.	7.
Building ID Number	**Length (ft)**	**Width (ft)**	**Base Elevation (m)**	**Building Height (m)**	**Number of Tiers**	**Description/Comments**
Building #1	750.00	125.00	0.00	25.00	1	Manufacturing Building

This form is designed to provide the air quality modeler with information on the buildings and structures located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the building ID number.
2. Provide the length of the building.
3. Provide the width of the building.
4. Provide the base elevation of the building. This elevation must be calculated by the same method as the sources and receptor elevation.
5. Provide the height of the building, from the ground.
6. Provide the number of tiers on the building. Refer to the State of Idaho Modeling Guideline for guidance on this topic.
7. Provide a description of the building.

AERSCREEN 15181 / AERMOD 15181
03/10/16

11:35:08

TITLE: Trails West EP1

********** POINTCAP PARAMETERS **********

SOURCE EMISSION RATE:	0.268E-02	g/s	0.212E-01	lb/hr
STACK HEIGHT:	8.49	meters	27.87	feet
STACK INNER DIAMETER:	0.864	meters	34.00	inches
PLUME EXIT TEMPERATURE:	297.0	K	75.0	Deg F
PLUME EXIT VELOCITY:	14.500	m/s	47.57	ft/s
STACK AIR FLOW RATE:	17997	ACFM		
RURAL OR URBAN:	RURAL			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING HEIGHT:	7.6	meters	25.0	feet
MAX BUILDING DIMENSION:	228.6	meters	750.0	feet
MIN BUILDING DIMENSION:	38.1	meters	125.0	feet
BUILDING ORIENTATION TO NORTH:	0.	degrees		
STACK DIRECTION FROM CENTER:	8.	degrees		
STACK DISTANCE FROM CENTER:	97.8	meters	321.0	feet

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 1. meters - 5000. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD
10	77.22	231.74	-213.65	-3.41	46.26	25.0	SUM
20	113.99	227.84	-209.63	-20.34	41.84	25.0	SUM
30	147.30	217.02	-199.23	-36.65	42.14	25.0	SUM
40	176.13	199.61	-182.78	-51.85	31.81	25.0	SUM
50	199.61	176.13	-160.78	-65.47	24.46	25.0	WIN
60	217.02	147.30	-133.89	-77.10	22.24	25.0	WIN
70	227.84	113.99	-102.93	-86.39	24.22	25.0	WIN
80	231.74	77.22	-68.85	-93.05	40.79	25.0	SUM
90*	228.60	38.10	-32.67	-96.89	56.20	25.0	SUM
100	231.74	77.22	-35.20	-97.78	14.61	50.0	SUM
110	227.84	113.99	-36.65	-95.71	7.012	100.0	SUM
120	217.02	147.30	-37.00	-90.72	5.316	125.0	SUM
130	199.61	176.13	-36.22	-82.98	4.631	150.0	SUM
140	176.13	199.61	-34.34	-72.71	4.372	175.0	SUM
150	147.30	217.02	-31.41	-60.24	4.352	200.0	SUM
160	113.99	227.84	-27.53	-45.94	4.527	225.0	SUM
170	77.22	231.74	-22.82	-30.24	5.358	225.0	SUM
180	38.10	228.60	-17.41	-13.62	7.408	225.0	SUM
190	77.22	231.74	-18.09	3.41	4.159	225.0	SUM
200	113.99	227.84	-18.22	20.34	3.957	225.0	SUM
210	147.30	217.02	-17.79	36.65	5.951	225.0	SUM
220	176.13	199.61	-16.83	51.85	6.007	200.0	SUM
230	199.61	176.13	-15.35	65.47	6.242	175.0	SUM
240	217.02	147.30	-13.41	77.10	6.922	150.0	SUM

	250	227.84	113.99	-11.06	86.39	8.507	125.0
SUM							
	260	231.74	77.22	-8.37	93.05	13.28	75.0
SUM							
	270	228.60	38.10	-5.43	96.89	34.65	50.0
SUM							
	280	231.74	77.22	-42.02	97.78	16.16	50.0
SUM							
	290	227.84	113.99	-77.33	95.71	10.09	50.0
SUM							
	300	217.02	147.30	-110.30	90.72	8.305	50.0
SUM							
	310	199.61	176.13	-139.91	82.98	7.803	50.0
SPR							
	320	176.13	199.61	-165.27	72.71	8.009	50.0
WIN							
	330	147.30	217.02	-185.61	60.24	8.883	50.0
WIN							
	340	113.99	227.84	-200.31	45.94	10.77	50.0
WIN							
	350	77.22	231.74	-208.92	30.24	18.63	25.0
SUM							
	360	38.10	228.60	-211.19	13.62	27.85	25.0
SUM							

* = worst case flow sector

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Cultivated Land
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Summer

ALBEDO: 0.20
BOWEN RATIO: 0.50
ROUGHNESS LENGTH: 0.200 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 17  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.18  0.026 -9.000  0.020 -999.   47.      8.7 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 17  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.18  0.026 -9.000  0.020 -999.   47.      8.7 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

```
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-----
 ********************** AERSCREEN AUTOMATED DISTANCES
**********************
                    OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE
 ------------------------------------------------------------------------
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```

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	42.85	2525.00	0.8292
25.00	56.20	2550.00	0.8249
50.00	34.65	2575.00	0.8222
75.00	16.41	2600.00	0.8194

100.00	13.17
125.00	10.99
150.00	9.417
175.00	8.232
200.00	7.305
225.00	7.408
250.00	6.101
275.00	5.791
300.00	5.518
325.00	5.274
350.00	5.055
375.00	4.842
400.00	4.627
425.00	4.411
450.00	4.195
475.00	3.978
500.00	3.762
525.00	3.548
550.00	3.337
575.00	3.131
600.00	2.929
625.00	2.768
650.00	2.673
675.00	2.579
700.00	2.486
725.00	2.394
750.00	2.302
775.00	2.211
800.00	2.122
825.00	2.040
850.00	2.003
875.00	1.967
900.00	1.932
925.00	1.899
950.00	1.866
975.00	1.835
1000.00	1.804
1025.00	1.775
1050.00	1.746
1075.00	1.718
1100.00	1.691
1125.00	1.664
1150.00	1.638
1175.00	1.613
1200.00	1.588
1225.00	1.564
1250.00	1.540
1275.00	1.517
1300.00	1.494
1325.00	1.472
1350.00	1.450
1375.00	1.429
1400.00	1.408
1425.00	1.387
2625.00	0.8165
2650.00	0.8137
2675.00	0.8108
2700.00	0.8078
2725.00	0.8049
2750.00	0.8019
2775.00	0.7989
2800.00	0.7959
2825.00	0.7929
2850.00	0.7898
2875.00	0.7868
2900.00	0.7837
2925.00	0.7806
2950.00	0.7775
2975.00	0.7744
3000.00	0.7712
3025.00	0.7681
3050.00	0.7650
3075.00	0.7618
3100.00	0.7587
3125.00	0.7555
3150.00	0.7524
3175.00	0.7492
3200.00	0.7461
3225.00	0.7429
3250.00	0.7398
3275.00	0.7366
3300.00	0.7337
3325.00	0.7310
3350.00	0.7283
3375.00	0.7256
3400.00	0.7229
3425.00	0.7202
3450.00	0.7175
3475.00	0.7147
3500.00	0.7120
3525.00	0.7093
3550.00	0.7066
3575.00	0.7038
3600.00	0.7011
3625.00	0.6984
3650.00	0.6957
3675.00	0.6930
3700.00	0.6903
3725.00	0.6875
3750.00	0.6848
3775.00	0.6821
3800.00	0.6794
3825.00	0.6768
3850.00	0.6741
3875.00	0.6714
3900.00	0.6687
3925.00	0.6661
3950.00	0.6634

1450.00	1.367	3975.00	0.6607
1475.00	1.348	4000.00	0.6581
1500.00	1.329	4025.00	0.6555
1525.00	1.310	4050.00	0.6528
1550.00	1.292	4075.00	0.6502
1575.00	1.274	4100.00	0.6476
1600.00	1.257	4125.00	0.6450
1625.00	1.239	4150.00	0.6424
1650.00	1.223	4175.00	0.6398
1675.00	1.206	4200.00	0.6372
1700.00	1.190	4225.00	0.6347
1725.00	1.173	4250.00	0.6321
1750.00	1.158	4275.00	0.6296
1775.00	1.142	4300.00	0.6270
1800.00	1.127	4325.00	0.6245
1825.00	1.111	4350.00	0.6220
1850.00	1.096	4375.00	0.6195
1875.00	1.082	4400.00	0.6170
1900.00	1.067	4425.00	0.6145
1925.00	1.053	4450.00	0.6120
1950.00	1.039	4475.00	0.6095
1975.00	1.025	4500.00	0.6071
2000.00	1.011	4525.00	0.6046
2025.00	0.9979	4550.00	0.6022
2050.00	0.9847	4575.00	0.5997
2075.00	0.9717	4600.00	0.5973
2100.00	0.9589	4625.00	0.5949
2125.00	0.9463	4650.00	0.5925
2150.00	0.9339	4675.00	0.5902
2175.00	0.9217	4700.00	0.5878
2200.00	0.9097	4725.00	0.5854
2225.00	0.8980	4750.00	0.5831
2250.00	0.8864	4775.00	0.5807
2275.00	0.8752	4800.00	0.5784
2300.00	0.8706	4825.00	0.5761
2325.00	0.8660	4850.00	0.5738
2350.00	0.8613	4875.00	0.5715
2375.00	0.8567	4900.00	0.5692
2400.00	0.8521	4925.00	0.5669
2425.00	0.8475	4950.00	0.5647
2450.00	0.8429	4975.00	0.5624
2475.00	0.8383	5000.00	0.5602
2500.00	0.8337		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	56.51	56.51	50.86	33.90	5.651

DISTANCE FROM SOURCE 30.00 meters directed toward 90 degrees

IMPACT AT THE AMBIENT BOUNDARY	42.85	42.85	38.57	25.71	4.285

DISTANCE FROM SOURCE 1.00 meters directed toward 10 degrees

AERSCREEN 15181 / AERMOD 15181
03/10/16

11:55:13

TITLE: Trails West EP2

********** POINTCAP PARAMETERS **********

SOURCE EMISSION RATE:	0.669E-03	g/s	0.531E-02	lb/hr
STACK HEIGHT:	8.20	meters	26.90	feet
STACK INNER DIAMETER:	0.864	meters	34.00	inches
PLUME EXIT TEMPERATURE:	297.0	K	75.0	Deg F
PLUME EXIT VELOCITY:	11.280	m/s	37.01	ft/s
STACK AIR FLOW RATE:	14000	ACFM		
RURAL OR URBAN:	RURAL			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING HEIGHT:	7.6	meters	25.0	feet
MAX BUILDING DIMENSION:	228.6	meters	750.0	feet
MIN BUILDING DIMENSION:	38.1	meters	125.0	feet
BUILDING ORIENTATION TO NORTH:	0.	degrees		
STACK DIRECTION FROM CENTER:	351.	degrees		
STACK DISTANCE FROM CENTER:	96.3	meters	316.0	feet

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 1. meters - 5000. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD
10	77.22	231.74	-206.94	-31.36	4.617	25.0	SUM
20	113.99	227.84	-198.16	-46.70	2.612	50.0	AUT
30	147.30	217.02	-183.36	-60.62	2.185	50.0	AUT
40	176.13	199.61	-162.99	-72.69	1.989	50.0	SUM
50	199.61	176.13	-137.67	-82.56	1.961	50.0	SUM
60	217.02	147.30	-108.16	-89.92	2.104	50.0	SUM
70	227.84	113.99	-75.37	-94.55	2.588	50.0	SUM
80	231.74	77.22	-40.29	-96.30	4.118	50.0	SUM
90	228.60	38.10	-3.98	-95.13	8.807	50.0	SUM
100	231.74	77.22	-7.25	-91.07	3.509	75.0	SUM
110	227.84	113.99	-10.30	-84.24	2.240	125.0	SUM
120	217.02	147.30	-13.03	-74.85	1.812	150.0	SUM
130	199.61	176.13	-15.37	-63.19	1.623	175.0	SUM
140	176.13	199.61	-17.24	-49.60	1.557	200.0	SUM
150	147.30	217.02	-18.59	-34.51	1.530	225.0	SUM
160	113.99	227.84	-19.38	-18.38	1.006	225.0	SUM
170	77.22	231.74	-19.57	-1.68	1.038	225.0	SUM
180	38.10	228.60	-19.17	15.07	1.844	225.0	SUM
190	77.22	231.74	-24.80	31.36	1.326	225.0	SUM
200	113.99	227.84	-29.68	46.70	1.172	200.0	SUM
210	147.30	217.02	-33.66	60.62	1.084	200.0	SUM
220	176.13	199.61	-36.62	72.69	1.095	175.0	SUM
230	199.61	176.13	-38.46	82.56	1.169	150.0	SUM
240	217.02	147.30	-39.13	89.92	1.355	125.0	SUM

	250	227.84	113.99	-38.62	94.55	1.816	100.0
SUM							
	260	231.74	77.22	-36.93	96.30	3.855	50.0
SUM							
	270*	228.60	38.10	-34.12	95.13	15.65	25.0
SUM							
	280	231.74	77.22	-69.97	91.07	13.18	25.0
SUM							
	290	227.84	113.99	-103.69	84.24	7.502	25.0
WIN							
	300	217.02	147.30	-134.26	74.85	6.699	25.0
WIN							
	310	199.61	176.13	-160.76	63.19	7.504	25.0
SUM							
	320	176.13	199.61	-182.36	49.60	9.345	25.0
SUM							
	330	147.30	217.02	-198.43	34.51	8.988	25.0
SUM							
	340	113.99	227.84	-208.47	18.38	10.71	25.0
SUM							
	350	77.22	231.74	-212.17	1.68	11.49	25.0
SUM							
	360	38.10	228.60	-209.43	-15.07	6.536	25.0
SUM							

* = worst case flow sector

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Cultivated Land
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Summer

ALBEDO: 0.20
BOWEN RATIO: 0.50
ROUGHNESS LENGTH: 0.200 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 17  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.18  0.026 -9.000  0.020 -999.   47.      8.7 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 29  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.42  0.026 -9.000  0.020 -999.   47.      3.8 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

```
 ------------------------------------------------------------------------
-----
 ********************** AERSCREEN AUTOMATED DISTANCES
**********************
                    OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE
 ------------------------------------------------------------------------
-----
```

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	11.47	2525.00	0.2287
25.00	15.65	2550.00	0.2277
50.00	9.294	2575.00	0.2268
75.00	4.168	2600.00	0.2258

100.00	3.369
125.00	2.791
150.00	2.395
175.00	2.096
200.00	1.862
225.00	1.844
250.00	1.562
275.00	1.484
300.00	1.416
325.00	1.354
350.00	1.299
375.00	1.244
400.00	1.190
425.00	1.135
450.00	1.079
475.00	1.024
500.00	0.9690
525.00	0.9146
550.00	0.8611
575.00	0.8088
600.00	0.7593
625.00	0.7299
650.00	0.7050
675.00	0.6803
700.00	0.6557
725.00	0.6313
750.00	0.6071
775.00	0.5832
800.00	0.5595
825.00	0.5361
850.00	0.5226
875.00	0.5133
900.00	0.5044
925.00	0.4958
950.00	0.4874
975.00	0.4793
1000.00	0.4714
1025.00	0.4638
1050.00	0.4564
1075.00	0.4491
1100.00	0.4421
1125.00	0.4352
1150.00	0.4285
1175.00	0.4219
1200.00	0.4154
1225.00	0.4091
1250.00	0.4029
1275.00	0.3968
1300.00	0.3909
1325.00	0.3850
1350.00	0.3792
1375.00	0.3737
1400.00	0.3684
1425.00	0.3631
2625.00	0.2248
2650.00	0.2238
2675.00	0.2228
2700.00	0.2218
2725.00	0.2208
2750.00	0.2198
2775.00	0.2188
2800.00	0.2178
2825.00	0.2168
2850.00	0.2158
2875.00	0.2148
2900.00	0.2138
2925.00	0.2130
2950.00	0.2121
2975.00	0.2113
3000.00	0.2104
3025.00	0.2096
3050.00	0.2087
3075.00	0.2078
3100.00	0.2070
3125.00	0.2061
3150.00	0.2052
3175.00	0.2044
3200.00	0.2035
3225.00	0.2026
3250.00	0.2018
3275.00	0.2009
3300.00	0.2000
3325.00	0.1992
3350.00	0.1983
3375.00	0.1974
3400.00	0.1966
3425.00	0.1957
3450.00	0.1949
3475.00	0.1940
3500.00	0.1932
3525.00	0.1923
3550.00	0.1915
3575.00	0.1906
3600.00	0.1898
3625.00	0.1890
3650.00	0.1881
3675.00	0.1873
3700.00	0.1865
3725.00	0.1856
3750.00	0.1848
3775.00	0.1840
3800.00	0.1832
3825.00	0.1824
3850.00	0.1816
3875.00	0.1807
3900.00	0.1799
3925.00	0.1791
3950.00	0.1784

1450.00	0.3579	3975.00	0.1776
1475.00	0.3528	4000.00	0.1768
1500.00	0.3478	4025.00	0.1760
1525.00	0.3430	4050.00	0.1752
1550.00	0.3381	4075.00	0.1744
1575.00	0.3334	4100.00	0.1737
1600.00	0.3287	4125.00	0.1729
1625.00	0.3241	4150.00	0.1721
1650.00	0.3196	4175.00	0.1714
1675.00	0.3151	4200.00	0.1706
1700.00	0.3107	4225.00	0.1698
1725.00	0.3063	4250.00	0.1691
1750.00	0.3020	4275.00	0.1683
1775.00	0.2978	4300.00	0.1676
1800.00	0.2936	4325.00	0.1669
1825.00	0.2894	4350.00	0.1661
1850.00	0.2854	4375.00	0.1654
1875.00	0.2814	4400.00	0.1647
1900.00	0.2774	4425.00	0.1639
1925.00	0.2735	4450.00	0.1632
1950.00	0.2697	4475.00	0.1625
1975.00	0.2659	4500.00	0.1618
2000.00	0.2621	4525.00	0.1611
2025.00	0.2585	4550.00	0.1604
2050.00	0.2548	4575.00	0.1597
2075.00	0.2513	4600.00	0.1590
2100.00	0.2478	4625.00	0.1583
2125.00	0.2459	4650.00	0.1576
2150.00	0.2443	4675.00	0.1569
2175.00	0.2428	4700.00	0.1562
2200.00	0.2413	4725.00	0.1556
2225.00	0.2399	4750.00	0.1549
2250.00	0.2390	4775.00	0.1542
2275.00	0.2381	4800.00	0.1536
2300.00	0.2372	4825.00	0.1529
2325.00	0.2363	4850.00	0.1522
2350.00	0.2354	4875.00	0.1516
2375.00	0.2344	4900.00	0.1509
2400.00	0.2335	4925.00	0.1503
2425.00	0.2325	4950.00	0.1496
2450.00	0.2316	4975.00	0.1490
2475.00	0.2306	5000.00	0.1484
2500.00	0.2297		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	15.73	15.73	14.15	9.436	1.573
DISTANCE FROM SOURCE	29.00 meters directed toward 270 degrees				
IMPACT AT THE AMBIENT BOUNDARY	11.47	11.47	10.33	6.883	1.147
DISTANCE FROM SOURCE	1.00 meters directed toward 270 degrees				

AERSCREEN 15181 / AERMOD 15181
03/10/16

13:16:30

TITLE: Trails West EP3

********** POINTCAP PARAMETERS **********

SOURCE EMISSION RATE:	0.669E-03	g/s	0.531E-02	lb/hr
STACK HEIGHT:	8.20	meters	26.90	feet
STACK INNER DIAMETER:	0.864	meters	34.00	inches
PLUME EXIT TEMPERATURE:	297.0	K	75.0	Deg F
PLUME EXIT VELOCITY:	11.280	m/s	37.01	ft/s
STACK AIR FLOW RATE:	14000	ACFM		
RURAL OR URBAN:	RURAL			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING HEIGHT:	7.6	meters	25.0	feet
MAX BUILDING DIMENSION:	228.6	meters	750.0	feet
MIN BUILDING DIMENSION:	38.1	meters	125.0	feet
BUILDING ORIENTATION TO NORTH:	0.	degrees		
STACK DIRECTION FROM CENTER:	354.	degrees		
STACK DISTANCE FROM CENTER:	93.0	meters	305.0	feet

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 1. meters - 5000. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD
10	77.22	231.74	-205.23	-25.63	4.477	50.0	SUM
20	113.99	227.84	-197.47	-40.75	3.189	50.0	SUM
30	147.30	217.02	-183.72	-54.64	2.619	50.0	SUM
40	176.13	199.61	-164.38	-66.87	2.350	50.0	SUM
50	199.61	176.13	-140.04	-77.07	2.324	50.0	SUM
60	217.02	147.30	-111.45	-84.92	2.520	50.0	SUM
70	227.84	113.99	-79.48	-90.20	3.172	50.0	SUM
80	231.74	77.22	-45.09	-92.73	5.399	50.0	SUM
90	228.60	38.10	-9.33	-92.45	10.45	50.0	SUM
100	231.74	77.22	-12.98	-89.36	3.558	75.0	SUM
110	227.84	113.99	-16.24	-83.55	2.338	100.0	SUM
120	217.02	147.30	-19.01	-75.20	1.762	150.0	SUM
130	199.61	176.13	-21.19	-64.57	1.559	175.0	SUM
140	176.13	199.61	-22.74	-51.98	1.480	200.0	SUM
150	147.30	217.02	-23.59	-37.81	1.493	200.0	SUM
160	113.99	227.84	-23.72	-22.49	1.467	225.0	SUM
170	77.22	231.74	-23.14	-6.48	1.016	225.0	SUM
180	38.10	228.60	-21.85	9.72	1.892	225.0	SUM
190	77.22	231.74	-26.51	25.63	1.396	225.0	SUM
200	113.99	227.84	-30.37	40.75	1.252	200.0	SUM
210	147.30	217.02	-33.31	54.64	1.180	200.0	SUM
220	176.13	199.61	-35.23	66.87	1.201	175.0	SUM
230	199.61	176.13	-36.08	77.07	1.284	150.0	SUM
240	217.02	147.30	-35.84	84.92	1.489	125.0	SUM

	250	227.84	113.99	-34.51	90.20	1.993	100.0
SUM							
	260	231.74	77.22	-32.13	92.73	4.030	50.0
SUM							
	270*	228.60	38.10	-28.77	92.45	15.59	25.0
SUM							
	280	231.74	77.22	-64.23	89.36	13.21	25.0
SUM							
	290	227.84	113.99	-97.75	83.55	7.944	25.0
SUM							
	300	217.02	147.30	-128.29	75.20	6.537	25.0
SUM							
	310	199.61	176.13	-154.94	64.57	6.434	25.0
SUM							
	320	176.13	199.61	-176.87	51.98	6.988	25.0
SUM							
	330	147.30	217.02	-193.44	37.81	7.350	50.0
SUM							
	340	113.99	227.84	-204.12	22.49	8.856	50.0
SUM							
	350	77.22	231.74	-208.60	6.48	8.719	25.0
SUM							
	360	38.10	228.60	-206.75	-9.72	8.133	25.0
SUM							

* = worst case flow sector

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Cultivated Land
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Summer

ALBEDO: 0.20
BOWEN RATIO: 0.50
ROUGHNESS LENGTH: 0.200 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 17  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.18  0.026 -9.000  0.020 -999.   47.      8.7 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 29  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.42  0.026 -9.000  0.020 -999.   47.      3.8 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

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-----
 ********************** AERSCREEN AUTOMATED DISTANCES
**********************
                    OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE
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-----
```

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	10.02	2525.00	0.2287
25.00	15.59	2550.00	0.2277
50.00	10.45	2575.00	0.2267
75.00	3.885	2600.00	0.2258

100.00	3.157
125.00	2.659
150.00	2.296
175.00	2.019
200.00	1.800
225.00	1.892
250.00	1.504
275.00	1.432
300.00	1.368
325.00	1.311
350.00	1.259
375.00	1.209
400.00	1.158
425.00	1.106
450.00	1.054
475.00	1.001
500.00	0.9490
525.00	0.8969
550.00	0.8455
575.00	0.7952
600.00	0.7477
625.00	0.7125
650.00	0.6886
675.00	0.6648
700.00	0.6412
725.00	0.6177
750.00	0.5944
775.00	0.5713
800.00	0.5484
825.00	0.5258
850.00	0.5044
875.00	0.4957
900.00	0.4873
925.00	0.4792
950.00	0.4713
975.00	0.4637
1000.00	0.4563
1025.00	0.4491
1050.00	0.4422
1075.00	0.4354
1100.00	0.4287
1125.00	0.4223
1150.00	0.4160
1175.00	0.4098
1200.00	0.4037
1225.00	0.3978
1250.00	0.3920
1275.00	0.3862
1300.00	0.3806
1325.00	0.3751
1350.00	0.3696
1375.00	0.3645
1400.00	0.3594
1425.00	0.3545
2625.00	0.2248
2650.00	0.2238
2675.00	0.2228
2700.00	0.2218
2725.00	0.2208
2750.00	0.2198
2775.00	0.2188
2800.00	0.2178
2825.00	0.2168
2850.00	0.2158
2875.00	0.2148
2900.00	0.2138
2925.00	0.2130
2950.00	0.2121
2975.00	0.2113
3000.00	0.2104
3025.00	0.2096
3050.00	0.2087
3075.00	0.2078
3100.00	0.2070
3125.00	0.2061
3150.00	0.2052
3175.00	0.2044
3200.00	0.2035
3225.00	0.2026
3250.00	0.2018
3275.00	0.2009
3300.00	0.2000
3325.00	0.1992
3350.00	0.1983
3375.00	0.1974
3400.00	0.1966
3425.00	0.1957
3450.00	0.1949
3475.00	0.1940
3500.00	0.1932
3525.00	0.1923
3550.00	0.1915
3575.00	0.1906
3600.00	0.1898
3625.00	0.1890
3650.00	0.1881
3675.00	0.1873
3700.00	0.1865
3725.00	0.1856
3750.00	0.1848
3775.00	0.1840
3800.00	0.1832
3825.00	0.1824
3850.00	0.1816
3875.00	0.1807
3900.00	0.1799
3925.00	0.1791
3950.00	0.1784

1450.00	0.3496	3975.00	0.1776
1475.00	0.3448	4000.00	0.1768
1500.00	0.3401	4025.00	0.1760
1525.00	0.3355	4050.00	0.1752
1550.00	0.3310	4075.00	0.1744
1575.00	0.3265	4100.00	0.1737
1600.00	0.3221	4125.00	0.1729
1625.00	0.3178	4150.00	0.1721
1650.00	0.3135	4175.00	0.1714
1675.00	0.3093	4200.00	0.1706
1700.00	0.3051	4225.00	0.1698
1725.00	0.3010	4250.00	0.1691
1750.00	0.2969	4275.00	0.1683
1775.00	0.2929	4300.00	0.1676
1800.00	0.2889	4325.00	0.1669
1825.00	0.2850	4350.00	0.1661
1850.00	0.2811	4375.00	0.1654
1875.00	0.2773	4400.00	0.1647
1900.00	0.2735	4425.00	0.1639
1925.00	0.2698	4450.00	0.1632
1950.00	0.2661	4475.00	0.1625
1975.00	0.2625	4500.00	0.1618
2000.00	0.2590	4525.00	0.1611
2025.00	0.2554	4550.00	0.1604
2050.00	0.2520	4575.00	0.1597
2075.00	0.2488	4600.00	0.1590
2100.00	0.2473	4625.00	0.1583
2125.00	0.2457	4650.00	0.1576
2150.00	0.2442	4675.00	0.1569
2175.00	0.2427	4700.00	0.1562
2200.00	0.2412	4725.00	0.1556
2225.00	0.2398	4750.00	0.1549
2250.00	0.2389	4775.00	0.1542
2275.00	0.2380	4800.00	0.1536
2300.00	0.2371	4825.00	0.1529
2325.00	0.2362	4850.00	0.1522
2350.00	0.2353	4875.00	0.1516
2375.00	0.2344	4900.00	0.1509
2400.00	0.2335	4925.00	0.1503
2425.00	0.2325	4950.00	0.1496
2450.00	0.2316	4975.00	0.1490
2475.00	0.2306	5000.00	0.1484
2500.00	0.2297		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	15.59	15.59	14.03	9.356	1.559
DISTANCE FROM SOURCE	26.00 meters directed toward 270 degrees				
IMPACT AT THE AMBIENT BOUNDARY	10.02	10.02	9.016	6.011	1.002
DISTANCE FROM SOURCE	1.00 meters directed toward 270 degrees				

AERSCREEN 15181 / AERMOD 15181
03/10/16

13:28:12

TITLE: Trails West EP4

********** POINTCAP PARAMETERS **********

SOURCE EMISSION RATE:	0.669E-03	g/s	0.531E-02	lb/hr
STACK HEIGHT:	8.20	meters	26.90	feet
STACK INNER DIAMETER:	0.864	meters	34.00	inches
PLUME EXIT TEMPERATURE:	297.0	K	75.0	Deg F
PLUME EXIT VELOCITY:	11.280	m/s	37.01	ft/s
STACK AIR FLOW RATE:	14000	ACFM		
RURAL OR URBAN:	RURAL			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING HEIGHT:	7.6	meters	25.0	feet
MAX BUILDING DIMENSION:	228.6	meters	750.0	feet
MIN BUILDING DIMENSION:	38.1	meters	125.0	feet
BUILDING ORIENTATION TO NORTH:	0.	degrees		
STACK DIRECTION FROM CENTER:	349.	degrees		
STACK DISTANCE FROM CENTER:	84.7	meters	278.0	feet

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 1. meters - 5000. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD
10	77.22	231.74	-194.98	-30.37	2.996	50.0	SUM
20	113.99	227.84	-186.56	-43.64	2.476	50.0	SUM
30	147.30	217.02	-172.46	-55.59	2.222	50.0	SUM
40	176.13	199.61	-153.13	-65.85	2.169	50.0	SUM
50	199.61	176.13	-129.14	-74.11	2.263	50.0	SUM
60	217.02	147.30	-101.23	-80.12	2.601	50.0	SUM
70	227.84	113.99	-70.25	-83.69	3.375	50.0	SUM
80	231.74	77.22	-37.13	-84.72	5.304	50.0	SUM
90	228.60	38.10	-2.88	-83.18	7.638	50.0	SUM
100	231.74	77.22	-8.24	-79.11	4.021	100.0	SUM
110	227.84	113.99	-13.35	-72.63	2.661	125.0	SUM
120	217.02	147.30	-18.05	-63.95	2.078	150.0	SUM
130	199.61	176.13	-22.21	-53.33	1.808	175.0	SUM
140	176.13	199.61	-25.69	-41.08	1.674	200.0	SUM
150	147.30	217.02	-28.39	-27.59	1.117	200.0	SUM
160	113.99	227.84	-30.23	-13.25	1.524	225.0	SUM
170	77.22	231.74	-31.15	1.48	1.016	225.0	SUM
180	38.10	228.60	-31.12	16.17	1.842	200.0	SUM
190	77.22	231.74	-36.76	30.37	1.336	200.0	SUM
200	113.99	227.84	-41.29	43.64	1.166	200.0	SUM
210	147.30	217.02	-44.56	55.59	1.178	175.0	SUM
220	176.13	199.61	-46.48	65.85	1.183	175.0	SUM
230	199.61	176.13	-46.98	74.11	1.312	150.0	SUM
240	217.02	147.30	-46.06	80.12	1.603	125.0	SUM

	250	227.84	113.99	-43.74	83.69	2.446	75.0
SUM							
	260	231.74	77.22	-40.09	84.72	5.608	50.0
SUM							
	270*	228.60	38.10	-35.22	83.18	15.77	25.0
SUM							
	280	231.74	77.22	-68.98	79.11	15.33	25.0
SUM							
	290	227.84	113.99	-100.64	72.63	14.46	25.0
SUM							
	300	217.02	147.30	-129.24	63.95	11.84	25.0
SUM							
	310	199.61	176.13	-153.92	53.33	8.883	50.0
SUM							
	320	176.13	199.61	-173.92	41.08	8.099	50.0
SUM							
	330	147.30	217.02	-188.63	27.59	7.300	50.0
SUM							
	340	113.99	227.84	-197.62	13.25	5.867	50.0
SUM							
	350	77.22	231.74	-200.60	-1.48	5.726	50.0
SUM							
	360	38.10	228.60	-197.48	-16.17	4.013	50.0
SUM							

* = worst case flow sector

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Cultivated Land
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Summer

ALBEDO: 0.20
BOWEN RATIO: 0.50
ROUGHNESS LENGTH: 0.200 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	17	17	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-0.18	0.026	-9.000	0.020	-999.	47.	8.7	0.200	0.50	0.20	0.50

HT	REF TA	HT
10.0	310.9	2.0

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR	MO	DY	JDY	HR
10	01	18	17	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-0.18	0.026	-9.000	0.020	-999.	94.	8.7	0.200	0.50	0.20	0.50

HT	REF TA	HT
10.0	310.9	2.0

********** AERSCREEN AUTOMATED DISTANCES **********

OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	11.94	2525.00	0.2287
25.00	15.77	2550.00	0.2277
50.00	10.10	2575.00	0.2267
75.00	4.359	2600.00	0.2258

100.00	4.021
125.00	2.906
150.00	2.489
175.00	2.174
200.00	1.929
225.00	1.731
250.00	1.618
275.00	1.536
300.00	1.464
325.00	1.399
350.00	1.341
375.00	1.284
400.00	1.227
425.00	1.169
450.00	1.111
475.00	1.054
500.00	0.9967
525.00	0.9402
550.00	0.8847
575.00	0.8306
600.00	0.7786
625.00	0.7503
650.00	0.7245
675.00	0.6989
700.00	0.6734
725.00	0.6482
750.00	0.6233
775.00	0.5985
800.00	0.5741
825.00	0.5499
850.00	0.5396
875.00	0.5299
900.00	0.5206
925.00	0.5116
950.00	0.5028
975.00	0.4943
1000.00	0.4861
1025.00	0.4781
1050.00	0.4703
1075.00	0.4627
1100.00	0.4553
1125.00	0.4480
1150.00	0.4409
1175.00	0.4340
1200.00	0.4272
1225.00	0.4206
1250.00	0.4140
1275.00	0.4076
1300.00	0.4013
1325.00	0.3951
1350.00	0.3891
1375.00	0.3833
1400.00	0.3776
1425.00	0.3720
2625.00	0.2248
2650.00	0.2238
2675.00	0.2228
2700.00	0.2218
2725.00	0.2208
2750.00	0.2198
2775.00	0.2188
2800.00	0.2178
2825.00	0.2168
2850.00	0.2158
2875.00	0.2148
2900.00	0.2138
2925.00	0.2130
2950.00	0.2121
2975.00	0.2113
3000.00	0.2104
3025.00	0.2096
3050.00	0.2087
3075.00	0.2078
3100.00	0.2070
3125.00	0.2061
3150.00	0.2052
3175.00	0.2044
3200.00	0.2035
3225.00	0.2026
3250.00	0.2018
3275.00	0.2009
3300.00	0.2000
3325.00	0.1992
3350.00	0.1983
3375.00	0.1974
3400.00	0.1966
3425.00	0.1957
3450.00	0.1949
3475.00	0.1940
3500.00	0.1932
3525.00	0.1923
3550.00	0.1915
3575.00	0.1906
3600.00	0.1898
3625.00	0.1890
3650.00	0.1881
3675.00	0.1873
3700.00	0.1865
3725.00	0.1856
3750.00	0.1848
3775.00	0.1840
3800.00	0.1832
3825.00	0.1824
3850.00	0.1816
3875.00	0.1807
3900.00	0.1799
3925.00	0.1791
3950.00	0.1784

1450.00	0.3665	3975.00	0.1776
1475.00	0.3611	4000.00	0.1768
1500.00	0.3559	4025.00	0.1760
1525.00	0.3507	4050.00	0.1752
1550.00	0.3456	4075.00	0.1744
1575.00	0.3406	4100.00	0.1737
1600.00	0.3357	4125.00	0.1729
1625.00	0.3308	4150.00	0.1721
1650.00	0.3260	4175.00	0.1714
1675.00	0.3213	4200.00	0.1706
1700.00	0.3166	4225.00	0.1698
1725.00	0.3120	4250.00	0.1691
1750.00	0.3075	4275.00	0.1683
1775.00	0.3030	4300.00	0.1676
1800.00	0.2986	4325.00	0.1669
1825.00	0.2942	4350.00	0.1661
1850.00	0.2900	4375.00	0.1654
1875.00	0.2857	4400.00	0.1647
1900.00	0.2816	4425.00	0.1639
1925.00	0.2775	4450.00	0.1632
1950.00	0.2735	4475.00	0.1625
1975.00	0.2695	4500.00	0.1618
2000.00	0.2656	4525.00	0.1611
2025.00	0.2618	4550.00	0.1604
2050.00	0.2580	4575.00	0.1597
2075.00	0.2543	4600.00	0.1590
2100.00	0.2506	4625.00	0.1583
2125.00	0.2470	4650.00	0.1576
2150.00	0.2441	4675.00	0.1569
2175.00	0.2426	4700.00	0.1562
2200.00	0.2411	4725.00	0.1556
2225.00	0.2397	4750.00	0.1549
2250.00	0.2388	4775.00	0.1542
2275.00	0.2380	4800.00	0.1536
2300.00	0.2371	4825.00	0.1529
2325.00	0.2362	4850.00	0.1522
2350.00	0.2353	4875.00	0.1516
2375.00	0.2344	4900.00	0.1509
2400.00	0.2334	4925.00	0.1503
2425.00	0.2325	4950.00	0.1496
2450.00	0.2316	4975.00	0.1490
2475.00	0.2306	5000.00	0.1484
2500.00	0.2296		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	15.90	15.90	14.31	9.537	1.590

DISTANCE FROM SOURCE 31.00 meters directed toward 270 degrees

IMPACT AT THE AMBIENT BOUNDARY	11.94	11.94	10.75	7.165	1.194

DISTANCE FROM SOURCE 1.00 meters directed toward 270 degrees

AERSCREEN 15181 / AERMOD 15181
03/10/16

13:39:31

TITLE: Trails West EP5

********** POINTCAP PARAMETERS **********

SOURCE EMISSION RATE:	0.669E-03	g/s	0.531E-02	lb/hr
STACK HEIGHT:	8.20	meters	26.90	feet
STACK INNER DIAMETER:	0.864	meters	34.00	inches
PLUME EXIT TEMPERATURE:	297.0	K	75.0	Deg F
PLUME EXIT VELOCITY:	11.280	m/s	37.01	ft/s
STACK AIR FLOW RATE:	14000	ACFM		
RURAL OR URBAN:	RURAL			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING HEIGHT:	7.6	meters	25.0	feet
MAX BUILDING DIMENSION:	228.6	meters	750.0	feet
MIN BUILDING DIMENSION:	38.1	meters	125.0	feet
BUILDING ORIENTATION TO NORTH:	0.	degrees		
STACK DIRECTION FROM CENTER:	351.	degrees		
STACK DISTANCE FROM CENTER:	83.2	meters	273.0	feet

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 1. meters - 5000. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD
10	77.22	231.74	-194.55	-27.09	3.334	50.0	SUM
20	113.99	227.84	-186.70	-40.35	2.729	50.0	SUM
30	147.30	217.02	-173.18	-52.37	2.454	50.0	SUM
40	176.13	199.61	-154.40	-62.80	2.366	50.0	SUM
50	199.61	176.13	-130.92	-71.33	2.462	50.0	SUM
60	217.02	147.30	-103.47	-77.69	2.827	50.0	SUM
70	227.84	113.99	-72.87	-81.69	3.697	50.0	SUM
80	231.74	77.22	-40.06	-83.20	5.775	50.0	SUM
90	228.60	38.10	-6.03	-82.19	8.920	50.0	SUM
100	231.74	77.22	-11.51	-78.68	3.311	100.0	SUM
110	227.84	113.99	-16.65	-72.78	2.646	125.0	SUM
120	217.02	147.30	-21.28	-64.67	2.046	150.0	SUM
130	199.61	176.13	-25.26	-54.59	1.761	175.0	SUM
140	176.13	199.61	-28.47	-42.86	1.628	200.0	SUM
150	147.30	217.02	-30.82	-29.82	1.085	200.0	SUM
160	113.99	227.84	-32.24	-15.88	1.338	225.0	SUM
170	77.22	231.74	-32.67	-1.45	1.014	200.0	SUM
180	38.10	228.60	-32.11	13.02	1.879	200.0	SUM
190	77.22	231.74	-37.19	27.09	1.379	200.0	SUM
200	113.99	227.84	-41.14	40.35	1.214	200.0	SUM
210	147.30	217.02	-43.84	52.37	1.234	175.0	SUM
220	176.13	199.61	-45.21	62.80	1.244	175.0	SUM
230	199.61	176.13	-45.21	71.33	1.376	150.0	SUM
240	217.02	147.30	-43.83	77.69	1.677	125.0	SUM

	250	227.84	113.99	-41.12	81.69	2.550	75.0
SUM							
	260	231.74	77.22	-37.16	83.20	5.460	50.0
SUM							
	270	228.60	38.10	-32.07	82.19	13.17	25.0
SUM							
	280*	231.74	77.22	-65.70	78.68	15.60	25.0
SUM							
	290	227.84	113.99	-97.34	72.78	13.15	25.0
SUM							
	300	217.02	147.30	-126.02	64.67	9.415	50.0
SUM							
	310	199.61	176.13	-150.87	54.59	7.417	50.0
SUM							
	320	176.13	199.61	-171.13	42.86	6.539	50.0
SUM							
	330	147.30	217.02	-186.20	29.82	6.344	50.0
SUM							
	340	113.99	227.84	-195.61	15.88	5.110	50.0
SUM							
	350	77.22	231.74	-199.07	1.45	5.263	50.0
SUM							
	360	38.10	228.60	-196.49	-13.02	4.336	50.0
SUM							

* = worst case flow sector

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Cultivated Land
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Summer

ALBEDO: 0.20
BOWEN RATIO: 0.50
ROUGHNESS LENGTH: 0.200 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 17  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.18  0.026 -9.000  0.020 -999.    47.      8.7 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
```

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

```
  YR MO DY JDY HR
  -- -- -- --- --
  10 01 18  17 01

     H0      U*      W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- -
  -0.18  0.026 -9.000  0.020 -999.    94.      8.7 0.200   0.50   0.20
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   310.9    2.0
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 ************************ AERSCREEN AUTOMATED DISTANCES
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                    OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE
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DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	11.44	2525.00	0.2287
25.00	15.60	2550.00	0.2277
50.00	10.37	2575.00	0.2267
75.00	4.011	2600.00	0.2258

100.00	3.311
125.00	2.713
150.00	2.335
175.00	2.048
200.00	1.879
225.00	1.641
250.00	1.529
275.00	1.454
300.00	1.388
325.00	1.329
350.00	1.276
375.00	1.224
400.00	1.171
425.00	1.118
450.00	1.064
475.00	1.010
500.00	0.9567
525.00	0.9036
550.00	0.8513
575.00	0.8002
600.00	0.7518
625.00	0.7233
650.00	0.6989
675.00	0.6746
700.00	0.6504
725.00	0.6264
750.00	0.6026
775.00	0.5791
800.00	0.5557
825.00	0.5326
850.00	0.5144
875.00	0.5055
900.00	0.4969
925.00	0.4885
950.00	0.4804
975.00	0.4726
1000.00	0.4650
1025.00	0.4576
1050.00	0.4504
1075.00	0.4434
1100.00	0.4366
1125.00	0.4299
1150.00	0.4234
1175.00	0.4170
1200.00	0.4108
1225.00	0.4047
1250.00	0.3986
1275.00	0.3927
1300.00	0.3869
1325.00	0.3812
1350.00	0.3756
1375.00	0.3702
1400.00	0.3650
1425.00	0.3599
2625.00	0.2248
2650.00	0.2238
2675.00	0.2228
2700.00	0.2218
2725.00	0.2208
2750.00	0.2198
2775.00	0.2188
2800.00	0.2178
2825.00	0.2168
2850.00	0.2158
2875.00	0.2148
2900.00	0.2138
2925.00	0.2130
2950.00	0.2121
2975.00	0.2113
3000.00	0.2104
3025.00	0.2096
3050.00	0.2087
3075.00	0.2078
3100.00	0.2070
3125.00	0.2061
3150.00	0.2052
3175.00	0.2044
3200.00	0.2035
3225.00	0.2026
3250.00	0.2018
3275.00	0.2009
3300.00	0.2000
3325.00	0.1992
3350.00	0.1983
3375.00	0.1974
3400.00	0.1966
3425.00	0.1957
3450.00	0.1949
3475.00	0.1940
3500.00	0.1932
3525.00	0.1923
3550.00	0.1915
3575.00	0.1906
3600.00	0.1898
3625.00	0.1890
3650.00	0.1881
3675.00	0.1873
3700.00	0.1865
3725.00	0.1856
3750.00	0.1848
3775.00	0.1840
3800.00	0.1832
3825.00	0.1824
3850.00	0.1816
3875.00	0.1807
3900.00	0.1799
3925.00	0.1791
3950.00	0.1784

1450.00	0.3548	3975.00	0.1776
1475.00	0.3498	4000.00	0.1768
1500.00	0.3450	4025.00	0.1760
1525.00	0.3403	4050.00	0.1752
1550.00	0.3356	4075.00	0.1744
1575.00	0.3309	4100.00	0.1737
1600.00	0.3264	4125.00	0.1729
1625.00	0.3219	4150.00	0.1721
1650.00	0.3174	4175.00	0.1714
1675.00	0.3131	4200.00	0.1706
1700.00	0.3087	4225.00	0.1698
1725.00	0.3045	4250.00	0.1691
1750.00	0.3002	4275.00	0.1683
1775.00	0.2961	4300.00	0.1676
1800.00	0.2920	4325.00	0.1669
1825.00	0.2879	4350.00	0.1661
1850.00	0.2839	4375.00	0.1654
1875.00	0.2800	4400.00	0.1647
1900.00	0.2761	4425.00	0.1639
1925.00	0.2723	4450.00	0.1632
1950.00	0.2685	4475.00	0.1625
1975.00	0.2648	4500.00	0.1618
2000.00	0.2611	4525.00	0.1611
2025.00	0.2575	4550.00	0.1604
2050.00	0.2539	4575.00	0.1597
2075.00	0.2504	4600.00	0.1590
2100.00	0.2470	4625.00	0.1583
2125.00	0.2455	4650.00	0.1576
2150.00	0.2441	4675.00	0.1569
2175.00	0.2426	4700.00	0.1562
2200.00	0.2411	4725.00	0.1556
2225.00	0.2397	4750.00	0.1549
2250.00	0.2388	4775.00	0.1542
2275.00	0.2379	4800.00	0.1536
2300.00	0.2371	4825.00	0.1529
2325.00	0.2362	4850.00	0.1522
2350.00	0.2353	4875.00	0.1516
2375.00	0.2343	4900.00	0.1509
2400.00	0.2334	4925.00	0.1503
2425.00	0.2325	4950.00	0.1496
2450.00	0.2315	4975.00	0.1490
2475.00	0.2306	5000.00	0.1484
2500.00	0.2296		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	15.60	15.60	14.04	9.359	1.560

DISTANCE FROM SOURCE 25.00 meters directed toward 280 degrees

IMPACT AT THE AMBIENT BOUNDARY	11.44	11.44	10.29	6.861	1.144

DISTANCE FROM SOURCE 1.00 meters directed toward 270 degrees

Trails West Manufacturing Facilty #2- AERSCREEN Modeling Parameters

Stack ID	Stack Height (m)	Stack Diameter (m)	Stack Flowrate (cfm)	Stack Velocity (m/s)	PM10 Emission Rate (lb/hr)	PM10 Emission Rate (g/s)	AERSCREEN Calculated Max. Conc. (ug/M^3)	24-Hour Average Persistance Factor	24-Hour PM10 Emissions (ug/M^3)	Annual Average Persistance Factor	Annual PM10 Emissions (ug/M^3)
EP1	8.5 (27.875ft)	0.86 (34 in)	18,000	14.50	0.02124	0.00268	56.51	0.4	22.604	0.08	4.521
EP2	8.2 (26.896 ft)	0.86 (34 in)	14,000	11.28	0.00531	0.00067	15.73	0.4	6.292	0.08	0.503
EP3	8.2 (26.896 ft)	0.86 (34 in)	14,000	11.28	0.00531	0.00067	15.59	0.4	6.236	0.08	0.499
EP4	8.2 (26.896 ft)	0.86 (34 in)	14,000	11.28	0.00531	0.00067	15.90	0.4	6.360	0.08	0.509
EP5	8.2 (26.896 ft)	0.86 (34 in)	14,000	11.28	0.00531	0.00067	15.60	0.4	6.240	0.08	0.499
Total							**119.33**		**47.732**		**6.53104**

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Preapplication Meeting Information Form FRA (Federal Requirements Applicability) - Regulatory Review

In each box in the table below, CTRL+click on the blue underlined text for instructions and information.

IDENTIFICATION	
1. Company Name: Trails West Manufacturing of Idaho, Inc.	2. Facility Name: Trails West Manufacturing Facility #2
3. Brief Project Description:	Seeking permit to construct for two paint booths at a trailer manufacturing facility.

4. List all applicable subparts of the New Source Performance Standards (NSPS) (40 CFR part 60). List all non-applicable subparts of the NSPS which may appear to apply to the facility but do not. Examples of NSPS-affected emissions units include internal combustion engines, boilers, turbines, etc. Applicant must thoroughly review the list of affected emissions units.	List of all applicable subpart(s): List of all non-applicable subpart(s) which may appear to apply but do not: ☑ Not Applicable
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR part 61 and 40 CFR part 63). List all non-applicable subparts of the NESHAP which may appear to apply to the facility but do not. Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. Reference EPA's webpage on NESHAPs for more information.	List of all applicable subpart(s): 40 CFR 63 Subpart HHHHHH List of all non-applicable subpart(s) which may appear to apply but do not: ☐ Not Applicable
6. For each subpart identified above, conduct a complete regulatory analysis using the instructions and referencing the example on the following pages. **Note** - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation does or does not apply. Regulatory reviews submitted with insufficient detail will be determined incomplete.	☑ A detailed regulatory review is provided (Follow instructions and example). ☐ DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date.

IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT.

It is emphasized that it is the applicant's responsibility to satisfy all technical and regulatory requirements, and that DEQ will help the applicant understand those requirements prior to submittal of the application but that DEQ will not perform the required technical or regulatory analyses on the applicant's behalf.

Instructions for Form FRA

Item 4 & 5. It is important that facilities review the most recent federal regulations when submitting their permit application to DEQ. Current federal regulations can be found at the following website: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl.

Item 6. For each applicable subpart identified under items 4-5, conduct a complete regulatory analysis. The facility must follow the procedure given below or obtain permission from DEQ to provide the necessary information using an alternative procedure:

1. Retrieve a TEXT or PDF copy of the applicable federal regulation subpart(s) online at http://www.gpoaccess.gov/cfr/retrieve.html.
2. Copy and paste the regulation(s) into the DEQ air permit application.
3. Highlight or underline sections in the regulation(s) that are applicable to the source(s).
4. Under each section of the subpart, explain why the source is or is not subject to the section in addition to how the source will comply with the section. When providing the explanation use a different font than the regulation (i.e. ***bold, italic***) so that it is easy for the reader to determine the text provided by the applicant. An example NSPS regulatory analysis is attached. The applicant must provide all information needed to determine applicability. If information is lacking or the analysis is incomplete, the application will be determined incomplete.

   Information on NSPS/NESHAP applicability determinations that may be useful to applicants is available on EPA's website: Clean Air Act Applicability Determination Index - Compliance Monitoring - EPA. Another useful source of information is the preamble to the regulation which is published in the Federal Register on the date the regulation was promulgated. Federal Registers may be found online at Federal Register: Main Page. The date the regulation was published in the Federal Register is included in the footnotes of the regulation.
5. DEQ will assist in identifying the applicable requirements that the applicant must include in the application, but will not perform the required technical or regulatory analysis on the applicant's behalf. Applicants should contact the Air Quality Permit Hotline (1-877-573-7648) to discuss NSPS/NESHAP regulatory analysis requirements or to schedule a meeting.
6. Facilities should also document a non-applicability determination on federal air regulations which may appear to apply to the facility but actually do not. A non-applicability determination will avoid future confusion and expedite the air permit application review. If you conduct an applicability determination and find that your activity is not NSPS or NESHAP affected facility, an analysis should be submitted using the methods described above.
7. **It is not sufficient to simply provide a copy of the NSPS or NESHAP. The applicant must address each section of the regulation as described above and as shown in the example that is provided.**

- Text highlighted in yellow indicates sections applicable to the source.
- *Text in italics* shows explanations of why the source is or is not subject to the regulation.

e-CFR data is current as of March 3, 2016

Title 40 → Chapter I → Subchapter C → Part 63 → Subpart HHHHHH → §63.11169

Browse Next

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)
Subpart HHHHHH—National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

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§63.11169 WHAT IS THE PURPOSE OF THIS SUBPART?

Except as provided in paragraph (d) of this section, this subpart establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in any of the activities in paragraphs (a) through (c) of this section. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards contained herein.

(a) Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Chemical Abstract Service number 75092, in paint removal processes;

(b) Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations;

(c) Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

(d) This subpart does not apply to any of the activities described in paragraph (d)(1) through (6) of this section.

(1) Surface coating or paint stripping performed on site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State), the National Aeronautics and Space Administration, or the National Nuclear Security Administration.

(2) Surface coating or paint stripping of military munitions, as defined in §63.11180, manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or equipment directly and exclusively used for the purposes of transporting military munitions.

(3) Surface coating or paint stripping performed by individuals on their personal vehicles, possessions, or property, either as a hobby or for maintenance of their personal vehicles, possessions, or property. This subpart also does not apply when these operations are performed by individuals for others without compensation. An individual who spray applies surface coating to more than two motor vehicles or pieces of mobile equipment per year is subject to the requirements in this subpart that pertain to motor vehicle and mobile equipment surface coating regardless of whether compensation is received.

(4) Surface coating or paint stripping that meets the definition of "research and laboratory activities" in §63.11180.

(5) Surface coating or paint stripping that meets the definition of "quality control activities" in §63.11180.

(6) Surface coating or paint stripping activities that are covered under another area source NESHAP.

Regulatory Analysis:

Trails West conducts spray applied surface coating operations on horse trailers at their manufacturing facility. The surface coating operations are subject to this subpart.

§63.11170 AM I SUBJECT TO THIS SUBPART?

(a) You are subject to this subpart if you operate an area source of HAP as defined in paragraph (b) of this section, including sources that are part of a tribal, local, State, or Federal facility and you perform one or more of the activities in paragraphs (a)(1) through (3) of this section:

(1) Perform paint stripping using MeCl for the removal of dried paint (including, but not limited to, paint, enamel, varnish, shellac, and lacquer) from wood, metal, plastic, and other substrates.

(2) Perform spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations, and mobile repair and refinishing operations that travel to the customer's location, except spray coating applications that meet the definition of facility maintenance in §63.11180. However, if you are the owner or operator of a motor vehicle or mobile equipment surface coating operation, you may petition the Administrator for an exemption from this subpart if you can demonstrate, to the satisfaction of the Administrator, that you spray apply no coatings that contain the target HAP, as defined in §63.11180. Petitions must include a description of the coatings that you spray apply and your certification that you do not spray apply any coatings containing the target HAP. If circumstances change such that you intend to spray apply coatings containing the target HAP, you must submit the initial notification required by 63.11175 and comply with the requirements of this subpart.

(3) Perform spray application of coatings that contain the target HAP, as defined in §63.11180, to a plastic and/or metal substrate on a part or product, except spray coating applications that meet the definition of facility maintenance or space vehicle in §63.11180.

(b) An area source of HAP is a source of HAP that is not a major source of HAP, is not located at a major source, and is not part of a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under

common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year, or emit any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year.

Regulatory Analysis:

Trails West conducts spray applied surface coating operations on horse trailers at their manufacturing facility. The surface coating operations are subject to this subpart.

§63.11171 HOW DO I KNOW IF MY SOURCE IS CONSIDERED A NEW SOURCE OR AN EXISTING SOURCE?

(a) This subpart applies to each new and existing affected area source engaged in the activities listed in §63.11170, with the exception of those activities listed in §63.11169(d) of this subpart.

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (6) of this section. Not all affected sources will have all of the items listed in paragraphs (b)(1) through (6) of this section.

(1) Mixing rooms and equipment;

(2) Spray booths, ventilated prep stations, curing ovens, and associated equipment;

(3) Spray guns and associated equipment;

(4) Spray gun cleaning equipment;

(5) Equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint; and

(6) Equipment used for paint stripping at paint stripping facilities using paint strippers containing MeCl.

(c) An affected source is a new source if it meets the criteria in paragraphs (c)(1) and (c)(2) of this section.

(1) You commenced the construction of the source after September 17, 2007 by installing new paint stripping or surface coating equipment. If you purchase and install spray booths, enclosed spray gun cleaners, paint stripping equipment to reduce MeCl emissions, or purchase new spray guns to comply with this subpart at an existing source, these actions would not make your existing source a new source.

(2) The new paint stripping or surface coating equipment is used at a source that was not actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.

(d) An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

(e) An affected source is an existing source if it is not a new source or a reconstructed source.

Regulatory Analysis:

Trails West has a paint mixing room, two spray booths with associated spray guns and equipment to apply primer and paint to horse and snowmobile trailers, spray gun cleaning equipment, and a solvent reclaimer. The paint booths and painting equipment at the facility were constructed and installed in 2016 and are classified as an new source under this subpart.

§63.11172 WHEN DO I HAVE TO COMPLY WITH THIS SUBPART?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) and (b) of this section.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is after September 17, 2007, the compliance date is January 9, 2008.

(2) If the initial startup of your new or reconstructed affected source occurs after January 9, 2008, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is January 10, 2011.

Regulatory Analysis:

Trails West is classified as an new source under this subpart and will be in compliance with this subpart upon initial startup of the paint booths.

§63.11173 WHAT ARE MY GENERAL REQUIREMENTS FOR COMPLYING WITH THIS SUBPART?

(a) Each paint stripping operation that is an affected area source must implement management practices to minimize the evaporative emissions of MeCl. The management practices must address, at a minimum, the practices in paragraphs (a)(1) through (5) of this section, as applicable, for your operations.

(1) Evaluate each application to ensure there is a need for paint stripping (e.g., evaluate whether it is possible to re-coat the piece without removing the existing coating).

(2) Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used.

(3) Reduce exposure of all paint strippers containing MeCl to the air.

(4) Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation).

(5) Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, air-tight containers).

(b) Each paint stripping operation that has annual usage of more than one ton of MeCl must develop and implement a written MeCl minimization plan to minimize the use and emissions of MeCl. The MeCl minimization plan must address, at a minimum, the management practices specified in paragraphs (a)(1) through (5) of this section, as applicable, for your operations. Each operation must post a placard or sign outlining the MeCl minimization plan in each area where paint stripping operations subject to this subpart occur. Paint stripping operations with annual usage of less than one ton of MeCl, must comply with the requirements in paragraphs (a)(1) through (5) of this section, as applicable, but are not required to develop and implement a written MeCl minimization plan.

(c) Each paint stripping operation must maintain copies of annual usage of paint strippers containing MeCl on site at all times.

(d) Each paint stripping operation with annual usage of more than one ton of MeCl must maintain a copy of their current MeCl minimization plan on site at all times.

(e) Each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation must meet the requirements in paragraphs (e)(1) through (e)(5) of this section.

(1) All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in paragraph (f) of this section. The spray application of surface coatings is prohibited by persons who are not certified as having completed the training described in paragraph (f) of this section. The requirements of this paragraph do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of this paragraph.

(2) All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of paragraph (e)(2)(i) of this section and either paragraph (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv) of this section.

(i) All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, "Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992" (incorporated by reference, see §63.14 of subpart A of this part). The test coating for measuring filter efficiency shall be a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch (psi) air pressure; the air flow rate across the filter shall be 150 feet per minute. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement. The requirements of this paragraph do not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.

(ii) Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls or preparation station curtains. However, if a spray booth is fully enclosed and has seals on all doors

and other openings and has an automatic pressure balancing system, it may be operated at up to, but not more than, 0.05 inches water gauge positive pressure.

(iii) Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.

(iv) Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.

(3) All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. The procedure used to demonstrate that spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002" (incorporated by reference, see §63.14 of subpart A of this part). The requirements of this paragraph do not apply to painting performed by students and instructors at paint training centers. The requirements of this paragraph do not apply to the surface coating of aerospace vehicles that involves the coating of components that normally require the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; to the application of coatings on aerospace vehicles that contain fillers that adversely affect atomization with HVLP spray guns; or to the application of coatings on aerospace vehicles that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.).

(4) All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used.

(5) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the emission standards in this section after you have requested approval to do so according to §63.6(g)(2).

(f) Each owner or operator of an affected miscellaneous surface coating source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.

(1) A list of all current personnel by name and job description who are required to be trained;

(2) Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the topics listed in paragraphs (f)(2)(i) through (2)(iv) of this section.

(i) Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.

(ii) Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.

(iii) Routine spray booth and filter maintenance, including filter selection and installation.

(iv) Environmental compliance with the requirements of this subpart.

(3) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in paragraph (f)(2) of this section are not required to provide the initial training required by that paragraph to these painters.

(g) As required by paragraph (e)(1) of this section, all new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract personnel, who spray apply surface coatings, as defined in §63.11180, must be trained by the dates specified in paragraphs (g)(1) and (2) of this section. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.

(1) If your source is a new source, all personnel must be trained and certified no later than 180 days after hiring or no later than July 7, 2008, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(2) If your source is an existing source, all personnel must be trained and certified no later than 180 days after hiring or no later than January 10, 2011, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(3) Training and certification will be valid for a period not to exceed five years after the date the training is completed, and all personnel must receive refresher training that meets the requirements of this section and be re-certified every five years.

[73 FR 1760, Jan. 9, 2008; 73 FR 8408, Feb. 13, 2008]

Regulatory Analysis:

All Trails West personnel who perform painting operations at the facility are certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment in compliance with this subpart. Any new employess will be trained and certified no later than 180 days after hiring.

The spray booths used to apply surface coatings to thetrailers are fully enclosed with four complete walls and a full roof and are ventilated using negative pressure. The filters used in the paint booths achieve an 99.7 percent capture of paint overspray.

All spray applied coatings at Trails West are applied with a HVLP spray gun. Additionally all the spray guns are cleaned such that no cleaning solvent or paint residue is created outside of the solvent reclaimer.

§63.11174 WHAT PARTS OF THE GENERAL PROVISIONS APPLY TO ME?

(a) Table 1 of this subpart shows which parts of the General Provisions in subpart A apply to you.

(b) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

Regulatory Analysis:

Trails West is not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) and is not obligated to obtain a permit under 40 CFR part 70 or 71.

§63.11175 WHAT NOTIFICATIONS MUST I SUBMIT?

(a) Initial Notification. If you are the owner or operator of a paint stripping operation using paint strippers containing MeCl and/or a surface coating operation subject to this subpart, you must submit the initial notification required by §63.9(b). For a new affected source, you must submit the Initial Notification no later than 180 days after initial startup or July 7, 2008, whichever is later. For an existing affected source, you must submit the initial notification no later than January 11, 2010. The initial notification must provide the information specified in paragraphs (a)(1) through (8) of this section.

(1) The company name, if applicable.

(2) The name, title, street address, telephone number, e-mail address (if available), and signature of the owner and operator, or other certifying company official;

(3) The street address (physical location) of the affected source and the street address where compliance records are maintained, if different. If the source is a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than at a fixed location, such as a collision repair shop, the notification should state this and indicate the physical location where records are kept to demonstrate compliance;

(4) An identification of the relevant standard (i.e., this subpart, 40 CFR part 63, subpart HHHHHH);

(5) A brief description of the type of operation as specified in paragraph (a)(5)(i) or (ii) of this section.

(i) For all surface coating operations, indicate whether the source is a motor vehicle and mobile equipment surface coating operation or a miscellaneous surface coating operation, and include the number of spray booths and preparation stations, and the number of painters usually employed at the operation.

(ii) For paint stripping operations, identify the method(s) of paint stripping employed (e.g., chemical, mechanical) and the substrates stripped (e.g., wood, plastic, metal).

(6) Each paint stripping operation must indicate whether they plan to annually use more than one ton of MeCl after the compliance date.

(7) A statement of whether the source is already in compliance with each of the relevant requirements of this subpart, or whether the source will be brought into compliance by the compliance date. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d) of this subpart. For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g) of this subpart.

(8) If your source is a new source, you must certify in the initial notification whether the source is in compliance with each of the requirements of this subpart. If your source is an existing source, you may certify in the initial notification that the source is already in compliance. If you are certifying in the initial notification that the source is in compliance with the relevant requirements of this subpart, then include also a statement by a responsible official with that official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the notification, a statement that the source has complied with all the relevant standards of this subpart, and that this initial notification also serves as the notification of compliance status.

(b) Notification of Compliance Status. If you are the owner or operator of a new source, you are not required to submit a separate notification of compliance status in addition to the initial notification specified in paragraph (a) of this subpart provided you were able to certify compliance on the date of the initial notification, as part of the initial notification, and your compliance status has not since changed. If you are the owner or operator of any existing source and did not certify in the initial notification that your source is already in compliance as specified in paragraph (a) of this section, then you must submit a notification of compliance status. You must submit a Notification of Compliance Status on or before March 11, 2011. You are required to submit the information specified in paragraphs (b)(1) through (4) of this section with your Notification of Compliance Status:

(1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.

(2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of

corrective actions being taken to achieve compliance. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d). For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g).

(3) The date of the Notification of Compliance Status.

(4) If you are the owner or operator of an existing affected paint stripping source that annually uses more than one ton of MeCl, you must submit a statement certifying that you have developed and are implementing a written MeCl minimization plan in accordance with §63.11173(b).

Regulatory Analysis:

Trails West will submit a initial notification and if needed a notification of compliance status to the EPA no later than 180 days after initial startup.

§63.11176 WHAT REPORTS MUST I SUBMIT?

(a) Annual Notification of Changes Report. If you are the owner or operator of a paint stripping, motor vehicle or mobile equipment, or miscellaneous surface coating affected source, you are required to submit a report in each calendar year in which information previously submitted in either the initial notification required by §63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. This includes notification when paint stripping affected sources that have not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) used more than one ton of MeCl in the previous calendar year. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in paragraphs (a)(1) through (2) of this section.

(1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.

(2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

(b) If you are the owner or operator of a paint stripping affected source that has not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) of this subpart, you must submit a report for any calendar year in which you use more than one ton of MeCl. This report must be submitted no later than March 1 of the following calendar year. You must also develop and implement a written MeCl minimization plan in accordance with §63.11173(b) no later than December 31. You must then submit a Notification of Compliance Status report containing the information specified in §63.11175(b) by March 1 of the following year and comply with the requirements for paint stripping operations that annually use more than one ton of MeCl in §§63.11173(d) and 63.11177(f).

Regulatory Analysis:

After Trails West has achieved compliance with this subpart an annual notification of changes report will be completed and submitted to the EPA.

§63.11177 WHAT RECORDS MUST I KEEP?

If you are the owner or operator of a surface coating operation, you must keep the records specified in paragraphs (a) through (d) and (g) of this section. If you are the owner or operator of a paint stripping operation, you must keep the records specified in paragraphs (e) through (g) of this section, as applicable.

(a) Certification that each painter has completed the training specified in §63.11173(f) with the date the initial training and the most recent refresher training was completed.

(b) Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in §63.11173(e)(3)(i).

(c) Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in §63.11173(e)(4).

(d) Copies of any notification submitted as required by §63.11175 and copies of any report submitted as required by §63.11176.

(e) Records of paint strippers containing MeCl used for paint stripping operations, including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations).

(f) If you are a paint stripping source that annually uses more than one ton of MeCl you are required to maintain a record of your current MeCl minimization plan on site for the duration of your paint stripping operations. You must also keep records of your annual review of, and updates to, your MeCl minimization plan.

(g) Records of any deviation from the requirements in §63.11173, §63.11174, §63.11175, or §63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.

(h) Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.

Regulatory Analysis:

Trails West will keep records pertaining to painters certifications, filter efficency documentation, spray gun documentation, copies of notifications and reports, a record of any deviations from this subpart, and a record of any assessments of compliance to this subpart.

§63.11178 IN WHAT FORM AND FOR HOW LONG MUST I KEEP MY RECORDS?

(a) If you are the owner or operator of an affected source, you must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period.

Regulatory Analysis:

Trails West will keep printed or electronic records at the manufacturing facility for a minimum of five years.

§63.11179 WHO IMPLEMENTS AND ENFORCES THIS SUBPART?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(c) The authority in §63.11173(e)(5) will not be delegated to State, local, or tribal agencies.

§63.11180 WHAT DEFINITIONS DO I NEED TO KNOW?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Administrator means, for the purposes of this rulemaking, the Administrator of the U.S. Environmental Protection Agency or the State or local agency that is granted delegation for implementation of this subpart.

Aerospace vehicle or component means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

Airless and air-assisted airless spray mean any paint spray technology that relies solely on the fluid pressure of the paint to create an atomized paint spray pattern and does not apply any atomizing compressed air to the paint before it leaves the paint nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized paint, but still uses fluid pressure to create the atomized paint.

Appurtenance means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamp posts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

Architectural coating means a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, or oil, from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means, for the purposes of this subpart, a material spray-applied to a substrate for decorative, protective, or functional purposes. For the purposes of this subpart, coating does not include the following materials:

(1) Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances.

(2) Paper film or plastic film that may be pre-coated with an adhesive by the film manufacturer.

(3) Adhesives, sealants, maskants, or caulking materials.

(4) Temporary protective coatings, lubricants, or surface preparation materials.

(5) In-mold coatings that are spray-applied in the manufacture of reinforced plastic composite parts.

Compliance date means the date by which you must comply with this subpart.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart.

Dry media blasting means abrasive blasting using dry media. Dry media blasting relies on impact and abrasion to remove paint from a substrate. Typically, a compressed air stream is used to propel the media against the coated surface.

Electrostatic application means any method of coating application where an electrostatic attraction is created between the part to be coated and the atomized paint particles.

Equipment cleaning means the use of an organic solvent to remove coating residue from the surfaces of paint spray guns and other painting related equipment, including, but not limited to stir sticks, paint cups, brushes, and spray booths.

Facility maintenance means, for the purposes of this subpart, surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended

capacity. *Facility maintenance* also includes surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities. *Facility maintenance* includes the application of coatings to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. *Facility maintenance* also includes the refinishing of mobile equipment in the field or at the site where they are used in service and at which they are intended to remain indefinitely after refinishing. Such mobile equipment includes, but is not limited to, farm equipment and mining equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility. Such mobile equipment also includes items, such as fork trucks, that are used in a manufacturing facility and which are refinished in that same facility. *Facility maintenance* does not include surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters.

High-volume, low-pressure (HVLP) spray equipment means spray equipment that is permanently labeled as such and used to apply any coating by means of a spray gun which is designed and operated between 0.1 and 10 pounds per square inch gauge (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

Initial startup means the first time equipment is brought online in a paint stripping or surface coating operation, and paint stripping or surface coating is first performed.

Materials that contain HAP or *HAP-containing materials* mean, for the purposes of this subpart, materials that contain 0.1 percent or more by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4), or 1.0 percent or more by mass for any other individual HAP.

Military munitions means all ammunition products and components produced or used by or for the U.S. Department of Defense (DoD) or for the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the National Nuclear Security Administration (NNSA), U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, biological weapons, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, nonnuclear components of nuclear weapons, wholly inert ammunition products, and all devices and components of any items listed in this definition.

Miscellaneous parts and/or products means any part or product made of metal or plastic, or combinations of metal and plastic. Miscellaneous parts and/or products include, but are not limited to, metal and plastic components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; automobiles and light duty trucks at automobile and light duty truck assembly plants; boats; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products.

Miscellaneous surface coating operation means the collection of equipment used to apply surface coating to miscellaneous parts and/or products made of metal or plastic, including applying cleaning

solvents to prepare the surface before coating application, mixing coatings before application, applying coating to a surface, drying or curing the coating after application, and cleaning coating application equipment, but not plating. A single surface coating operation may include any combination of these types of equipment, but always includes at least the point at which a coating material is applied to a given part. A surface coating operation includes all other steps (such as surface preparation with solvent and equipment cleaning) in the affected source where HAP are emitted from the coating of a part. The use of solvent to clean parts (for example, to remove grease during a mechanical repair) does not constitute a miscellaneous surface coating operation if no coatings are applied. A single affected source may have multiple surface coating operations. Surface coatings applied to wood, leather, rubber, ceramics, stone, masonry, or substrates other than metal and plastic are not considered miscellaneous surface coating operations for the purposes of this subpart.

Mobile equipment means any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agriculture equipment, motor homes, and other recreational vehicles (including camping trailers and fifth wheels).

Motor vehicle means any self-propelled vehicle, including, but not limited to, automobiles, light duty trucks, golf carts, vans, and motorcycles.

Motor vehicle and mobile equipment surface coating means the spray application of coatings to assembled motor vehicles or mobile equipment. For the purposes of this subpart, it does not include the surface coating of motor vehicle or mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant.

Non-HAP solvent means, for the purposes of this subpart, a solvent (including thinners and cleaning solvents) that contains less than 0.1 percent by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and less than 1.0 percent by mass for any other individual HAP.

Paint stripping and/or miscellaneous surface coating source or facility means any shop, business, location, or parcel of land where paint stripping or miscellaneous surface coating operations are conducted.

Paint stripping means the removal of dried coatings from wood, metal, plastic, and other substrates. A single affected source may have multiple paint stripping operations.

Painter means any person who spray applies coating.

Plastic refers to substrates containing one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites.

Protective oil means organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Quality control activities means surface coating or paint stripping activities that meet all of the following criteria:

(1) The activities associated with a surface coating or paint stripping operation are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation, and comparing the samples against specific performance criteria.

(2) The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts that are surface coated or stripped are not sold and do not leave the facility.

(3) The activities are not a normal part of the surface coating or paint stripping operation; for example, they do not include color matching activities performed during a motor vehicle collision repair.

(4) The activities do not involve surface coating or stripping of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity; that is, the activities are not facility maintenance.

Research and laboratory activities means surface coating or paint stripping activities that meet one of the following criteria:

(1) Conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants, or environmental impact.

(2) Activities conducted to test more efficient production processes, including alternative paint stripping or surface coating materials or application methods, or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit.

(3) Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit.

Solvent means a fluid containing organic compounds used to perform paint stripping, surface prep, or cleaning of surface coating equipment.

Space Vehicle means vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters).

Spray-applied coating operations means coatings that are applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of this subpart, spray-applied coatings do not include the following materials or activities:

(1) Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters).

(2) Surface coating application using powder coating, hand-held, non-refillable aerosol containers, or non-atomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.

(3) Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray, among other names) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.

Surface preparation or *Surface prep* means use of a cleaning material on a portion of or all of a substrate prior to the application of a coating.

Target HAP are compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).

Target HAP containing coating means a spray-applied coating that contains any individual target HAP that is an Occupational Safety and Health Administration (OSHA)-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) at a concentration greater than 0.1 percent by mass, or greater than 1.0 percent by mass for any other individual target HAP compound. For the purpose of determining whether materials you use contain the target HAP compounds, you may rely on formulation data provided by the manufacturer or supplier, such as the material safety data sheet (MSDS), as long as it represents each target HAP compound in the material that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other target HAP compounds.

Transfer efficiency means the amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage. Coating solids means the nonvolatile portion of the coating that makes up the dry film.

Truck bed liner coating means any coating, excluding color coats, labeled and formulated for application to a truck bed to protect it from surface abrasion.

Regulatory Analysis:

The highlighted definitions in this section apply to applicable sections of this subpart that apply to the Trails West facility.

Table 1 to Subpart HHHHHH of Part 63—Applicability of General Provisions to Subpart HHHHHH of Part 63

Citation	Subject	Applicable to subpart HHHHHH	Explanation
§63.1(a)(1)–(12)	General Applicability	Yes	
§63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability of subpart HHHHHH is also specified in §63.11170.
§63.1(c)(1)	Applicability After Standard Established	Yes	
§63.1(c)(2)	Applicability of Permit Program for Area Sources	Yes	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.1(c)(5)	Notifications	Yes	

§63.1(e)	Applicability of Permit Program to Major Sources Before Relevant Standard is Set	No	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.2	Definitions	Yes	Additional definitions are specified in §63.11180.
§63.3(a)–(c)	Units and Abbreviations	Yes	
§63.4(a)(1)–(5)	Prohibited Activities	Yes	
§63.4(b)–(c)	Circumvention/Fragmentation	Yes	
§63.5	Construction/Reconstruction of major sources	No	Subpart HHHHHH applies only to area sources.
§63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes	
§63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(e)(1)–(2)	Operation and Maintenance	Yes	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	No	No startup, shutdown, and malfunction plan is required by subpart HHHHHH.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	
§63.6(f)(2)–(3)	Methods for Determining Compliance	Yes	
§63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart HHHHHH does not establish opacity or visible emission standards.
§63.6(i)(1)–(16)	Extension of Compliance	Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7	Performance Testing Requirements	No	No performance testing is required by subpart HHHHHH.
§63.8	Monitoring Requirements	No	Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(a)–(d)	Notification Requirements	Yes	§63.11175 specifies notification requirements.
§63.9(e)	Notification of Performance Test	No	Subpart HHHHHH does not require performance tests.
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart HHHHHH does not have opacity or visible emission standards.
§63.9(g)	Additional Notifications When Using CMS	No	Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(h)	Notification of Compliance Status	No	§63.11175 specifies the dates and required content for submitting the notification of compliance status.

§63.9(i)	Adjustment of Submittal Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	§63.11176(a) specifies the dates for submitting the notification of changes report.
§63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §63.11177.
§63.10(b)(2)(i)–(xi)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	No	Subpart HHHHHH does not require startup, shutdown, and malfunction plans, or CMS.
§63.10(b)(2)(xii)	Waiver of recordkeeping requirements	Yes	
§63.10(b)(2)(xiii)	Alternatives to the relative accuracy test	No	Subpart HHHHHH does not require the use of CEMS.
§63.10(b)(2)(xiv)	Records supporting notifications	Yes	
§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	
§63.10(c)	Additional Recordkeeping Requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.
§63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in §63.11176.
§63.10(d)(2)–(3)	Report of Performance Test Results, and Opacity or Visible Emissions Observations	No	Subpart HHHHHH does not require performance tests, or opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	No	Subpart HHHHHH does not require startup, shutdown, and malfunction reports.
§63.10(e)	Additional Reporting requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§63.11	Control Device Requirements/Flares	No	Subpart HHHHHH does not require the use of flares.
§63.12	State Authority and Delegations	Yes	
§63.13	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	Yes	
§63.14	Incorporation by Reference	Yes	Test methods for measuring paint booth filter efficiency and spray gun transfer efficiency in §63.11173(e)(2) and (3) are incorporated and included in §63.14.
§63.15	Availability of Information/Confidentiality	Yes	
§63.16(a)	Performance Track Provisions—reduced reporting	Yes	

§63.16(b)–(c)	Performance Track Provisions—reduced reporting	No	Subpart HHHHHH does not establish numerical emission limits.

Regulatory Analysis:

Trails west is subject to the highlighted requirements in accordance with § 63.11174.