



# SUBMITTAL SHEET

Dondlinger Construction  
120024- - COW -Hess Pump Station Valve Replacement

**Project:** 120024-  
COW -Hess Pump Station Valve Replacement  
1401 Museum Blvd Contact Tim Helten at 316-650-2029  
to schedule deliveries  
Wichita, KS  
67202


**Spec Section Num:**  
**Submittal:** 099600-001  
**Revision:** 0  
**Package:**  
**Date:** 12/8/2020 UTC

**Submittal Title:** High Performance Coatings  
**Submittal Detail:**  
**Response Due By:** 12/22/2020 UTC

**Contractor:**  
Eric Swenson  
Dondlinger Construction

<b>Contractor's Stamp</b>	
DONDLINGER AND SONS CONST. CO., INC.	
<input checked="" type="checkbox"/>	Reviewed <u>ES</u>
<input type="checkbox"/>	Reviewed as Noted _____
<input type="checkbox"/>	Revise and Resubmit _____
<input type="checkbox"/>	Date <u>12/8/20</u>
<input type="checkbox"/>	Submittal No. <u>099600-001</u>
REVIEW OF ITEMS DOES NOT RELIEVE VENDOR FROM COMPLYING WITH REQUIREMENTS OF CONTRACT PLANS AND SPECIFICATIONS, CONTRACT AND CITY, STATE AND LOCAL CODES.	

**Architect:**  
Trevor Kaufman  
PROFESSIONAL ENG. CONSULTANTS

<b>SUBMITTAL REVIEW</b>	
<input checked="" type="checkbox"/> <b>APPROVED</b>	Approval is only for general conformance with the design concept of the project. Contractor at all times remains responsible for compliance with the Contract Documents. Deviations are not approved unless Contractor has in writing called Engineer's attention to such deviation at the time of submission and Engineer has in writing approved the specific deviation. No acceptance by Engineer relieves Contractor from responsibility for errors or omissions in Compliance Submittals.
<input type="checkbox"/> <b>APPROVED AS NOTED</b> <small>if checked above, fabrication MAY be undertaken and re-submittal is not required unless specifically noted in the correction comments. Review does not authorize changes to Contract Sum unless stated in a Change Order.</small>	
<input type="checkbox"/> <b>REVISE AND RESUBMIT</b> <small>if checked below, fabrication MAY NOT be undertaken. Resubmit corrected copies for final approval. Correction shall be limited to items marked.</small>	
<input type="checkbox"/> <b>REJECTED</b> <small>5/10</small>	
 <b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> BY <u>Trevor Kaufman</u> DATE <u>12/9/2020</u>	

**Response:**  
**Comment:**



Coating to be applied to new valve, couplings and fasteners.

Date: December 3, 2020

To: Dondlinger Construction

Attn: Eric Swenson

Ref: **COW – HESS Valve Replacement Project – Paint Submittal**

Valve/Couplings/Associated Pipe Exteriors (Shop-primed):

- Surface Prep: SSPC-SP1 Solvent Cleaning; Surfaces must be clean and dry prior to coating
  - Spot Prime Bare Steel: Tnemec Series N69 Hi-Build Epoxoline II @ 3.0-5.0 mils DFT – Color Selected by Owner
  - Coat 1: Tnemec Series N69 Hi-Build Epoxoline II @ 3.0-5.0 mils DFT – Color Selected by Owner
  - Finish Coat: Tnemec Series N69 Hi-Build Epoxoline II @ 3.0-5.0 mils DFT – Color Selected by Owner

*Please note: Stainless/Zinc hardware will not be coated.*

Attachments:

- Product Data Sheet: Tnemec Series N69 Hi-Build Epoxoline II
- Safety Data Sheet: Tnemec Series N69 Hi-Build Epoxoline II

**Thank you,**

A handwritten signature in blue ink, appearing to read "Kyle Long", is written over a light blue horizontal line.

**Kyle Long**  
Project Manager/Estimator

**SAFE**

**QUALITY**

**SOLUTIONS**



# HI-BUILD EPOXOLINE® II SERIES N69

## PRODUCT PROFILE

<b>GENERIC DESCRIPTION</b>	Polyamidoamine Epoxy
<b>COMMON USAGE</b>	An advanced generation epoxy for protection and finishing of steel and concrete. It has excellent resistance to abrasion and is suitable for immersion as well as chemical contact exposure. Contact your local Tnemec representative for a list of chemicals. This product can also be used for lining storage tanks that contain demineralized, deionized or distilled water.
<b>COLORS</b>	Refer to Tnemec Color Guide. <b>Note:</b> Epoxies chalk with extended exposure to sunlight. Lack of ventilation, incomplete mixing, miscatalyzation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may cause yellowing to occur.
<b>FINISH</b>	Satin

## COATING SYSTEM

<b>SURFACER/FILLER/PATCHER</b>	Series 215, 217, 218
<b>PRIMERS</b>	<b>Steel:</b> Self-priming or Series 1, 27, 27WB, 37H, 66, L69, L69F, N69F, V69F, 90E-92, 90-97, H90-97, 90G-1K97, 90-98, 91-H <sub>2</sub> O, 94-H <sub>2</sub> O, 135, 161, 394, V530 <b>Galvanized Steel and Non-Ferrous Metal:</b> Self-priming or Series 66, L69, L69F, N69F, V69F, 161 <b>Concrete:</b> Self-priming or Series 27WB, 130, 1254 <b>CMU:</b> Self-priming or 130, 1254
<b>TOPCOATS</b>	Series 22, 27WB, 46H-413, 66, L69, L69F, N69, N69F, V69, V69F, 72, 73, 104, 113, 114, 118, 141, 156, 157, 161, 180, 181, 262, 265, 287, 446, 740, 750, 1026, 1028, 1029, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1074, 1074U, 1075, 1075U, 1077, 1078, 1078V, 1080, 1081, 1094, 1095, 1096, 1224. <b>Note:</b> The following recoat times apply for Series N69: Immersion Service—Surface must be scarified after 60 days. Atmospheric Service—After 60 days, scarification or an epoxy tie-coat is required. When topcoating with Series 740 or 750, recoat time for N69 is 21 days for atmospheric service. Contact your Tnemec representative for specific recommendations.

## SURFACE PREPARATION

<b>STEEL</b>	<b>Immersion Service:</b> SSPC-SP10/NACE 2 Near-White Blast Cleaning or ISO Sa 2 1/2 Very Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils. <b>Non-Immersion Service:</b> SSPC-SP6/NACE 3 Commercial Blast Cleaning or ISO Sa 2 Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils. <b>Note:</b> Commercial Blast Cleaning generally produces the best coating performance for this exposure. If conditions will not permit this, in moderate exposures Series N69 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces (SSPC Rust Grade Condition C).
<b>GALVANIZED STEEL &amp; NON-FERROUS METAL</b>	Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services.
<b>CAST/DUCTILE IRON</b>	All external surfaces of ductile iron pipe and fittings shall be delivered to the application facility without asphalt or any other protective lining on the exterior surface. All oils, small deposits of asphalt paint, grease, and soluble deposits should be removed and uniformly abrasive blasted using angular abrasive in accordance with NAPF 500-03-04: External Pipe Surface condition. When viewed without magnification, the exterior surfaces shall be free of all visible dirt, dust, loose annealing oxide, rust, mold coating and other foreign matter. Any area where rust reappears before application shall be reblasted. The surface shall contain a minimum angular anchor profile of 1.5 mils (38.1 microns) (Reference NACE RP0287 or ASTM D 4417, Method C).
<b>CONCRETE</b>	Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" (relative humidity should not exceed 80%), or D 4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no moisture present). Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide an ICRI-CSP 2-3 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.
<b>CMU</b>	Allow mortar to cure for 28 days. Level protrusions and mortar spatter.
<b>PAINTED SURFACES</b>	<b>Non-Immersion Service:</b> Ask your Tnemec representative for specific recommendations.
<b>PRIMED SURFACES</b>	<b>Immersion Service:</b> Scarify the Series N69 prime coat surface by abrasive-blasting with a fine abrasive before topcoating if: (a) the Series N69 prime coat has been in exterior exposure for 60 days or longer and Series 66, 46H-413, L69, L69F, N69, N69F, V69, V69F or 161 is the specified topcoat; (b) the Series N69 prime coat has been in exterior exposure for 14 days or longer and Series 104 is the specified topcoat; (c) the Series N69 prime coat has been in exterior exposure for 7 days or longer and Series 262 or 265 is the specified topcoat.
<b>ALL SURFACES</b>	Must be clean, dry and free of oil, grease, chalk and other contaminants.

## TECHNICAL DATA

<b>VOLUME SOLIDS</b>	67.0 ± 2.0% (mixed) †
<b>RECOMMENDED DFT</b>	2.0 to 10.0 mils (50 to 255 microns) per coat. <b>Note:</b> The number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

# HI-BUILD EPOXOLINE® II | SERIES N69

**CURING TIME AT 5 MILS DFT**

Without 44-700 Accelerator

Temperature	To Handle	To Recoat	Immersion
90°F (32°C)	5 hours	7 hours	7 days
80°F (27°C)	7 hours	9 hours	7 days
70°F (21°C)	9 hours	12 hours	7 days
60°F (16°C)	16 hours	22 hours	9 to 12 days
50°F (10°C)	24 hours	32 hours	12 to 14 days

Curing time varies with surface temperature, air movement, humidity and film thickness. **Note:** For faster curing and low-temperature applications, add No. 44-700 Epoxy Accelerator; see separate product data sheet for cure information.

**VOLATILE ORGANIC COMPOUNDS**

**Unthinned:** 2.40 lbs/gallon (285 grams/litre)  
**Thinned 10% (No. 4 Thinner):** 2.80 lbs/gallon (334 grams/litre)  
**Thinned 10% (No. 60 Thinner):** 2.80 lbs/gallon (335 grams/litre)

**HAPS**

**Unthinned:** 2.40 lbs/gal solids  
**Thinned 10% (No. 4 Thinner):** 3.25 lbs/gal solids  
**Thinned 10% (No. 60 Thinner):** 2.40 lbs/gal solids

**THEORETICAL COVERAGE**

1,074 mil sq ft/gal (26.4 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates. †

**NUMBER OF COMPONENTS**

Two: Part A (amine) and Part B (epoxy) — One (Part A) to one (Part B) by volume.

**PACKAGING**

	Part A	Part B	Yield (mixed)
Large Kit	5 gallon pail	5 gallon pail	10 gallons (37.9 L)
Small Kit	1 gallon can	1 gallon can	2 gallons (7.6 L)

**NET WEIGHT PER GALLON**

13.67 ± 0.25 lbs (6.10 ± .11 kg) (mixed) †

**STORAGE TEMPERATURE**

Minimum 20°F (-7°C) Maximum 110°F (43°C)

**TEMPERATURE RESISTANCE**

(Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

**SHELF LIFE**

Part A: 24 months; Part B: 12 months at recommended storage temperature.

**FLASH POINT - SETA**

Part A: 82°F (28°C) Part B: 93°F (34°C)

**HEALTH & SAFETY**

Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product.  
**Keep out of the reach of children.**

**APPLICATION**

**COVERAGE RATES**

	Dry MILS (Microns)	Wet MILS (Microns)	Sq Ft/Gal (m <sup>2</sup> /Gal)
Suggested (1)	6.0 (150)	9.0 (230)	179 (16.6)
Minimum	2.0 (50)	3.0 (75)	537 (49.9)
Maximum	10.0 (250)	15.0 (375)	107 (10.0)

**Dense Concrete & Masonry:** From 100 to 150 sq ft (9.3 to 13.9 m<sup>2</sup>) per gallon.

**CMU:** From 75 to 100 sq ft (7.0 to 9.3 m<sup>2</sup>) per gallon.

**(1) Note for Steel:** Roller or brush application requires two or more coats to obtain recommended film thickness. Also, Series N69 can be spray applied to an optional high-build film thickness range of 8.0 to 10.0 dry mils (205 to 255 dry microns) or 11.5 to 14.5 wet mils (209 to 370 wet microns). Allow for overspray and surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance. †

**MIXING**

Start with equal amounts of Series N69 Parts A and B. Power mix contents of each container separately, making sure no pigment remains on the bottom. Pour a measured amount of Part B into a clean container large enough to hold both components. If Series 44-700 is not being used, proceed with mixing and add an equal volume of Part A to Part B while under agitation. Continue agitation until the two components are thoroughly mixed. **Note:** Both components must be above 50°F (10°C) prior to mixing. For optimum mixing and application properties, the material should be above 60°F (16°C).

If using Series N69 accelerator, slowly add four (4) fluid ounces of 44-700 per gallon to Series N69 Part A material while under agitation and proceed with adding Part B. **Note:** The use of more than the recommended amount of 44-700 will adversely affect performance.

Thin by volume and thoroughly mix. Failure to thoroughly mix the Part A and Part B components prior to thinning can affect product's gloss and performance. Do not use mixed material beyond pot life limits. **Note:** For application of the unaccelerated version to surfaces between 50°F to 60°F (10°C to 16°C) or the accelerated version to surfaces between 35°F to 50°F (2°C to 10°C), allow mixed material to stand 30 minutes and stir before using.

**THINNING**

Use No. 4 or No. 60 Thinner. For air spray, thin up to 10% or 3/4 pint (380 mL) per gallon. For airless spray, roller or brush, thin up to 5% or 1/4 pint (190 mL) per gallon.

**POT LIFE**

Without 44-700: 6 hours at 50°F (10°C) 4 hours at 75°F (24°C) 1 hour at 100°F (38°C)  
 With 44-700: 2 hours at 50°F (10°C) 1 hour at 75°F (24°C) 30 minutes at 100°F (38°C)

**SPRAY LIFE**

Without 44-700: 1 hour at 75°F (24°C) With 44-700: 30 minutes at 75°F (24°C)  
**Note:** Spray application after listed times will adversely affect ability to achieve recommended dry film thickness.

# HI-BUILD EPOXOLINE® II | SERIES N69

**APPLICATION EQUIPMENT**

**Air Spray ‡**

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	E	765 or 704	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	50-80 psi (3.4-5.5 bar)	10-20 psi (0.7-1.4 bar)

Low temperatures or longer hoses require higher pot pressure.

**Airless Spray ‡**

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.019" (380-485 microns)	3000-4800 psi (207-330 bar)	1/4" or 3/8" (6.4 or 9.5 mm)	60 mesh (250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

‡ Spray application of first coat on CMU should be followed by backrolling. **Note:** Application over inorganic zinc-rich primers: Apply a wet mist coat and allow tiny bubbles to form. When bubbles disappear in 1 to 2 minutes, apply a full wet coat at specified mil thickness.

**Roller:** Use 3/8" or 1/2" (9.5 mm or 12.7 mm) synthetic woven nap roller cover. Use longer nap to obtain penetration on rough or porous surfaces.

**Brush:** Recommended for small areas only. Use high quality natural or synthetic bristle brushes.

**SURFACE TEMPERATURE**

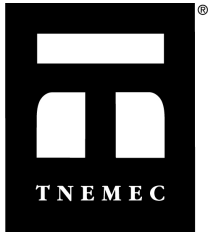
Minimum 50°F (10°C) Maximum 135°F (57°C) The surface should be dry and at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature.

**CLEANUP**

Flush and clean all equipment immediately after use with the recommended thinner or MEK.

† Values may vary with color.

WARRANTY & LIMITATION OF SELLER'S LIABILITY: Tnemec Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Tnemec Company, Inc. THE WARRANTY DESCRIBED IN THE ABOVE PARAGRAPH SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The buyer's sole and exclusive remedy against Tnemec Company, Inc. shall be for replacement of the product in the event a defective condition of the product should be found to exist and the exclusive remedy shall not have failed its essential purpose as long as Tnemec is willing to provide comparable replacement product to the buyer. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, ENVIRONMENTAL INJURIES OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. Technical and application information herein is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and Tnemec Company makes no claim that these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.



# Safety Data Sheet

Issue Date 14-Aug-2018

Revision Date 10-May-2018

Revision Number 18

## 1. IDENTIFICATION

### Product identifier

**Product Code** N-69-00WHA  
**Product Name** HB EPOXOLINEII TNEMEC WHITE

### Other means of identification

**Common Name** SERIES N69/V69, PART A  
**UN/ID no.** 1263  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** industrial paint.  
**Uses advised against** Consumer use, For professional use only. Not for residential use.

### Details of the supplier of the safety data sheet

**Manufacturer Address** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400  
**Distributor** Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

### Emergency telephone number

**Company Phone Number** Tnemec Regulatory Dept: 816-474-3400  
**24 Hour Emergency Phone Number** 800-535-5053 (Infotrac)

## 2. HAZARDS IDENTIFICATION

### Classification

### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable Liquids	Category 3

### Label elements

## EMERGENCY OVERVIEW

### **Danger**

### **Hazard statements**

Harmful if swallowed  
Causes skin irritation  
Causes serious eye damage  
May cause an allergic skin reaction  
Suspected of causing cancer  
Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness  
 Causes damage to organs through prolonged or repeated exposure  
 Flammable liquid and vapor



**Appearance** opaque

**Physical state** liquid

**Odor** aromatic

### Precautionary Statements

#### Prevention

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 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/mixing/equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

#### Response

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  
 Immediately call a POISON CENTER or doctor/physician  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

#### Storage

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed  
 Keep away from children

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

#### Other information

Harmful to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

8.93713 % of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
BARIUM SULFATE (TOTAL DUST)	7727-43-7	10 - <30%
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - <30%
TALC (RESPIRABLE DUST)	14807-96-6	10 - <30%
XYLENE	1330-20-7	1 - <10%
MODIFIED CYCLOALIPHATIC POLYAMINE	68953-36-6	1 - <10%
BENZYL ALCOHOL	100-51-6	1 - <10%
N-BUTANOL (SKIN)	71-36-3	1 - <10%
ETHYL BENZENE	100-41-4	1 - <10%
ISOPHORONE DIAMINE	2855-13-2	1 - <10%
AMORPHOUS SILICA	7631-86-9	1 - <10%
UREA RESIN	-	0.1 - <1%
ALUMINUM OXIDES	1344-28-1	0.1 - <1%
ALUMINUM HYDROXIDE	21645-51-2	0.1 - <1%
PROPRIETARY	-	0.1 - <1%
ZIRCONIUM OXIDE	1314-23-4	0.1 - <1%
MAGNESITE	546-93-0	0.1 - <1%
TETRAETHYLENEPENTAMINE	112-57-2	0.1 - <1%
P-P'-ISOPROPYLIDENEDIPHENOL	80-05-7	0.1 - <1%
BENZENE, 1,3-DIMETHYL	108-38-3	0.1 - <1%
FORMALDEHYDE	50-00-0	0 - <0.1%

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

#### Most important symptoms and effects, both acute and delayed

**Notes to physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

#### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe

fumes

**Hazardous combustion products** Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Aldehydes. Carbon oxides. Hydrocarbons. Oxides of nitrogen.

**Protective equipment and precautions for firefighters**

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. **MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS.** Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation.

**Environmental Precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up**

**Methods for containment** Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

**Methods for cleaning up** If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling** Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Incompatible products** Strong oxidizing agents. Acids. Bases. Cleaning solutions such as Chromerge and Aqua Regia.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
BARIUM SULFATE (TOTAL DUST) 7727-43-7	TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	

TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	5000 mg/m <sup>3</sup>
TALC (RESPIRABLE DUST) 14807-96-6	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	1000 mg/m <sup>3</sup>
XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>	
N-BUTANOL (SKIN) 71-36-3	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m <sup>3</sup> TWA: 100 ppm TWA: 300 mg/m <sup>3</sup>	1400 ppm
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>	800 ppm
AMORPHOUS SILICA 7631-86-9	-	TWA: 6 mg/m <sup>3</sup>	3000 mg/m <sup>3</sup>
ALUMINUM OXIDES 1344-28-1	TWA: 1 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	
ALUMINUM HYDROXIDE 21645-51-2	TWA: 1 mg/m <sup>3</sup>	-	
ZIRCONIUM OXIDE 1314-23-4	TWA: 5 mg/m <sup>3</sup>	-	25 mg/m <sup>3</sup>
BENZENE, 1,3-DIMETHYL 108-38-3	TWA: 100 ppm STEL: 150 ppm	-	900 ppm
FORMALDEHYDE 50-00-0	TWA: 0.1 ppm STEL: 0.3 ppm	TWA: 3 ppm STEL: 10 ppm Ceiling: 5 ppm TWA: 0.75 ppm STEL: 2 ppm	20 ppm

**Appropriate engineering controls****Engineering measures**

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

**Skin and body protection**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection**

Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	aromatic
<b>Appearance</b>	opaque	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>		
<b>Melting point / freezing point</b>	No data available	
<b>Boiling point / boiling range</b>	116 °C / 241.0 °F	
<b>Flash point</b>	26 °C / 78.0 °F	Pensky Martens - Closed Cup
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No data available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit</b>	12.3	
<b>Lower flammability limit</b>	1.5	
<b>Vapor pressure</b>		
<b>Vapor density</b>		
<b>Specific gravity</b>	1.82981	
<b>Water solubility</b>	Insoluble in cold water	
<b>Solubility in other solvents</b>		
<b>Partition coefficient: n-octanol/water</b>		
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>		
<b>Kinematic viscosity</b>		
<b>Dynamic viscosity</b>	1100 centipoises	approx

**Other Information**

<b>Density</b>	15.26062 lbs/gal
<b>Volatile organic compounds (VOC) content</b>	2.62788 lbs/gal
<b>Total volatiles weight percent</b>	17.22 %
<b>Total volatiles volume percent</b>	36.7 %
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks. Epoxy constituents.

**Incompatible materials**

Strong oxidizing agents, Acids, Bases, Cleaning solutions such as Chromerge and Aqua Regia

**Hazardous decomposition products**

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Oxides of nitrogen. Aldehydes. Hydrocarbons. Carbon oxides.

**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure**

<b>Inhalation</b>	Vapors may irritate throat and respiratory system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
<b>Eye contact</b>	Causes serious eye damage.
<b>Skin contact</b>	Irritating to skin. May cause sensitization by skin contact.
<b>Ingestion</b>	Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
BARIUM SULFATE (TOTAL DUST) 7727-43-7	= 307000 mg/kg ( Rat )	-	-
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	> 10000 mg/kg ( Rat )	-	-
XYLENE 1330-20-7	= 3500 mg/kg ( Rat )	> 1700 mg/kg ( Rabbit ) > 4350 mg/kg ( Rabbit )	= 29.08 mg/L ( Rat ) 4 h = 5000 ppm ( Rat ) 4 h
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg ( Rat )	= 2 g/kg ( Rabbit )	= 8.8 mg/L ( Rat ) 4 h
N-BUTANOL (SKIN) 71-36-3	= 700 mg/kg ( Rat ) = 790 mg/kg ( Rat )	= 3400 mg/kg ( Rabbit ) = 3402 mg/kg ( Rabbit )	> 8000 ppm ( Rat ) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg ( Rat )	= 15400 mg/kg ( Rabbit )	= 17.4 mg/L ( Rat ) 4 h
ISOPHORONE DIAMINE 2855-13-2	= 1030 mg/kg ( Rat )	-	-
AMORPHOUS SILICA 7631-86-9	= 7900 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
ALUMINUM OXIDES 1344-28-1	> 5000 mg/kg ( Rat )	-	-
ALUMINUM HYDROXIDE 21645-51-2	> 5000 mg/kg ( Rat )	-	-
TETRAETHYLENEPENTAMINE 112-57-2	= 3990 mg/kg ( Rat )	= 660 µL/kg ( Rabbit )	-
P-P'-ISOPROPYLIDENEDIPHENOL 80-05-7	= 3300 mg/kg ( Rat )	= 3 mL/kg ( Rabbit )	> 170 mg/m <sup>3</sup> ( Rat ) 6 h
BENZENE, 1,3-DIMETHYL 108-38-3	= 5 g/kg ( Rat )	= 12.18 g/kg ( Rabbit ) = 14100 µL/kg ( Rabbit )	= 5984 ppm ( Rat ) 6 h
FORMALDEHYDE 50-00-0	= 100 mg/kg ( Rat )	= 270 mg/kg ( Rabbit )	= 0.578 mg/L ( Rat ) 4 h

### Information on toxicological effects

**Symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Irritating to skin.  
**Eye damage/irritation** Risk of serious damage to eyes.  
**Chronic Toxicity** Skin sensitizer. Substances known to be mutagenic to man. Substances known to impair fertility. May cause cancer. Avoid repeated exposure.  
**Sensitization** May cause sensitization of susceptible persons.  
**Mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7		Group 2B	-	X
TALC (RESPIRABLE DUST) 14807-96-6		Group 2B Group 3	-	
XYLENE 1330-20-7		Group 3	-	
ETHYL BENZENE 100-41-4	A3	Group 2B	-	X

AMORPHOUS SILICA 7631-86-9		Group 1 Group 3	Known	
BENZENE, 1,3-DIMETHYL 108-38-3		Group 3	-	
FORMALDEHYDE 50-00-0	A1	Group 1	Known	X

<b>Reproductive effects</b>	Suspected of damaging fertility or the unborn child.
<b>STOT - single exposure</b>	Eyes, Central Nervous System (CNS), Skin
<b>STOT - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure
<b>Target organ effects</b>	blood, Central nervous system, Central Vascular System (CVS), Gastrointestinal tract, Eyes, kidney, liver, Lungs, respiratory system, Skin.
<b>Aspiration hazard</b>	No information available.
<b>Acute Toxicity</b>	8.93713 % of the mixture consists of ingredient(s) of unknown toxicity.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

11.87839 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
TALC (RESPIRABLE DUST) 14807-96-6		100: 96 h Brachydanio rerio g/L LC50 semi-static	
XYLENE 1330-20-7		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
BENZYL ALCOHOL 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static	23: 48 h water flea mg/L EC50
N-BUTANOL (SKIN) 71-36-3	500: 72 h Desmodosmus subspicatus mg/L EC50 500: 96 h Desmodosmus subspicatus mg/L EC50	1730 - 1910: 96 h Pimephales promelas mg/L LC50 static 100000 - 500000: 96 h Lepomis macrochirus µg/L LC50 static 1740: 96 h Pimephales promelas mg/L LC50 flow-through 1910000: 96 h Pimephales promelas µg/L LC50 static	1897 - 2072: 48 h Daphnia magna mg/L EC50 Static 1983: 48 h Daphnia magna mg/L EC50
ETHYL BENZENE 100-41-4	4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	1.8 - 2.4: 48 h Daphnia magna mg/L EC50
ISOPHORONE DIAMINE 2855-13-2	37: 72 h Desmodosmus subspicatus mg/L EC50	110: 96 h Leuciscus idus mg/L LC50 semi-static	14.6 - 21.5: 48 h Daphnia magna mg/L EC50 semi-static 42: 24 h Daphnia magna mg/L EC50
AMORPHOUS SILICA 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static	7600: 48 h Ceriodaphnia dubia mg/L EC50
TETRAETHYLENEMPENTAMINE	2.1: 72 h Pseudokirchneriella	420: 96 h Poecilia reticulata mg/L	24.1: 48 h Daphnia magna mg/L

112-57-2	subcapitata mg/L EC50	LC50 static	EC50
P-P'-ISOPROPYLIDENEDIPHENOL L 80-05-7	2.5: 96 h Pseudokirchneriella subcapitata mg/L EC50	3.6 - 5.4: 96 h Pimephales promelas mg/L LC50 flow-through 9.9: 96 h Brachydanio rerio mg/L LC50 static 4.0 - 5.5: 96 h Pimephales promelas mg/L LC50 static 4: 96 h Oncorhynchus mykiss mg/L LC50	10.2: 48 h Daphnia magna mg/L EC50 9.2 - 11.4: 48 h Daphnia magna mg/L EC50 Static 3.9: 48 h Daphnia magna mg/L EC50
BENZENE, 1,3-DIMETHYL 108-38-3	4.9: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	14.3 - 18: 96 h Pimephales promelas mg/L LC50 flow-through 8.4: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 12.9: 96 h Poecilia reticulata mg/L LC50 semi-static	2.81 - 5.0: 48 h Daphnia magna mg/L EC50 Static
FORMALDEHYDE 50-00-0		22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static 0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 1510: 96 h Lepomis macrochirus µg/L LC50 static 100 - 136: 96 h Oncorhynchus mykiss mg/L LC50 static	2: 48 h Daphnia magna mg/L LC50 11.3 - 18: 48 h Daphnia magna mg/L EC50 Static

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility in Environmental Media**

Chemical name	log Pow
XYLENE 1330-20-7	2.77
BENZYL ALCOHOL 100-51-6	1.1
N-BUTANOL (SKIN) 71-36-3	0.785
ETHYL BENZENE 100-41-4	3.118
ISOPHORONE DIAMINE 2855-13-2	0.79
TETRAETHYLENEPENTAMINE 112-57-2	.99
P-P'-ISOPROPYLIDENEDIPHENOL 80-05-7	2.2
BENZENE, 1,3-DIMETHYL 108-38-3	3.2
FORMALDEHYDE 50-00-0	0.35

**Other Adverse Effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal Methods**

Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE 1330-20-7		Included in waste stream: F039		U239
N-BUTANOL (SKIN) 71-36-3		Included in waste stream: F039		U031
ETHYL BENZENE 100-41-4		Included in waste stream: F039		
FORMALDEHYDE 50-00-0	U122	Included in waste streams: K009, K010, K038, K040, K156, K157		U122

Chemical name	CAWAST
XYLENE 1330-20-7	Toxic Ignitable
N-BUTANOL (SKIN) 71-36-3	Toxic
ETHYL BENZENE 100-41-4	Toxic Ignitable
FORMALDEHYDE 50-00-0	Toxic Ignitable

**14. TRANSPORT INFORMATION**

**DOT**

UN/ID no. 1263  
 Proper Shipping Name PAINT  
 Hazard Class 3  
 Packing Group III  
 Emergency Response Guide Number 128

**Additional information**

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA Complies  
 DSL/NDSL Complies  
 EINECS/ELINCS Complies  
 ENCS Does Not Comply  
 IECSC Complies  
 KECL Complies  
 PICCS Does Not Comply  
 AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):**

Chemical name HAPS Data  
 XYLENE  
 ETHYL BENZENE  
 BENZENE, 1,3-DIMETHYL

FORMALDEHYDE

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
BARIUM SULFATE (TOTAL DUST) - 7727-43-7	1.0
XYLENE - 1330-20-7	1.0
N-BUTANOL (SKIN) - 71-36-3	1.0
ETHYL BENZENE - 100-41-4	0.1
ALUMINUM OXIDES - 1344-28-1	1.0
P-P'-ISOPROPYLIDENEDIPHENOL - 80-05-7	1.0
BENZENE, 1,3-DIMETHYL - 108-38-3	1.0
FORMALDEHYDE - 50-00-0	0.1

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE 1330-20-7	100 lb			X
ETHYL BENZENE 100-41-4	1000 lb	X	X	X
BENZENE, 1,3-DIMETHYL 108-38-3				X
FORMALDEHYDE 50-00-0	100 lb			X

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs	RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
N-BUTANOL (SKIN) 71-36-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ETHYL BENZENE 100-41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
BENZENE, 1,3-DIMETHYL 108-38-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
FORMALDEHYDE 50-00-0	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

**California Prop. 65**

**WARNING:** This product can expose you to the following chemicals which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical name	California Prop. 65
TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7	Carcinogen
ETHYL BENZENE - 100-41-4	Carcinogen
AMORPHOUS SILICA - 7631-86-9	Carcinogen
P-P'-ISOPROPYLIDENEDIPHENOL - 80-05-7	Female Reproductive
BENZENE, 1,3-DIMETHYL - 108-38-3	*
FORMALDEHYDE - 50-00-0	Carcinogen
BENZENE, 1,4-DIMETHYL - 106-42-3	*
BENZENE, 1,2-DIMETHYL - 95-47-6	*
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen

**California SCAQMD Rule 443**

Contains Photochemically Reactive Solvent

**State Right-to-Know**

Chemical name	New Jersey	Massachusetts	Pennsylvania
BARIUM SULFATE (TOTAL DUST) 7727-43-7	X	X	X
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	X	X	X
TALC (RESPIRABLE DUST) 14807-96-6	X	X	X
XYLENE 1330-20-7	X	X	X
BENZYL ALCOHOL 100-51-6		X	X
N-BUTANOL (SKIN) 71-36-3	X	X	X
ETHYL BENZENE 100-41-4	X	X	X
ISOPHORONE DIAMINE 2855-13-2	X		
AMORPHOUS SILICA 7631-86-9		X	X
ALUMINUM OXIDES 1344-28-1	X	X	X
ZIRCONIUM OXIDE 1314-23-4		X	
MAGNESITE 546-93-0	X	X	
TETRAETHYLENEPENTAMINE 112-57-2	X	X	X
P-P'-ISOPROPYLDENEDIPHENOL 80-05-7	X	X	X
BENZENE, 1,3-DIMETHYL 108-38-3	X	X	X
FORMALDEHYDE 50-00-0	X	X	X

**16. OTHER INFORMATION**

**NFPA** Health 2 Flammability 3 Instability 1 Physical hazard \*  
**HMIS (Hazardous Material Information System)** Health 2\* Flammability 3 Reactivity 1

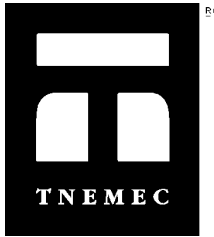
**Prepared By** Tnemec Regulatory Dept: 816-474-3400  
**Issue Date** 23-May-2017  
**Revision Date** 10-May-2018  
**Revision Summary**  
 9 4 5 7 10 8 2 11 14 1 15

**Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**End of SDS**



# Safety Data Sheet

Issue Date 14-Aug-2018

Revision Date 17-Jul-2018

Revision Number 22

## 1. IDENTIFICATION

### Product identifier

**Product Code** N-69-0069B  
**Product Name** H-B EPOXOLINE II CONVERTER

### Other means of identification

**Common Name** SERIES N69/N69F, PART B  
**UN/ID no.** 1263  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** industrial paint.  
**Uses advised against** Consumer use, For professional use only. Not for residential use.

### Details of the supplier of the safety data sheet

**Manufacturer Address** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400  
**Distributor** Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

### Emergency telephone number

**Company Phone Number** Tnemec Regulatory Dept: 816-474-3400  
**24 Hour Emergency Phone Number** 800-535-5053 (Infotrac)  
**Emergency Telephone** 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 3

### Label elements

## EMERGENCY OVERVIEW

### **Danger**

#### **Hazard statements**

Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause genetic defects  
May cause cancer  
May damage fertility or the unborn child

May cause damage to organs through prolonged or repeated exposure  
Flammable liquid and vapor



**Appearance** opaque

**Physical state** liquid

**Odor** aromatic

### Precautionary Statements

#### Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves  
Do not breathe dust/fume/gas/mist/vapors/spray  
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/mixing/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

#### Response

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 eye irritation persists: Get medical advice/attention  
If skin irritation or rash occurs: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

#### Storage

Store locked up  
Store in a well-ventilated place. Keep cool  
Keep away from children

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

##### Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

26.1844305 % of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
TALC (RESPIRABLE DUST)	14807-96-6	30 - <60%
EPOXY RESIN (LER)	25085-99-8	10 - <30%
PROPRIETARY RESIN	-	10 - <30%
BARIUM SULFATE (TOTAL DUST)	7727-43-7	1 - <10%

XYLENE	1330-20-7	1 - <10%
METHYL ISOBUTYL KETONE	108-10-1	1 - <10%
AROMATIC HYDROCARBON MIXTURE	64742-95-6	1 - <10%
1,2,4-TRIMETHYLBENZENE	95-63-6	1 - <10%
ETHYL BENZENE	100-41-4	1 - <10%
BENZENE, 1,4-DIMETHYL	106-42-3	0.1 - <1%
1,3,5-TRIMETHYLBENZENE	108-67-8	0.1 - <1%
BENZENE, 1,3-DIMETHYL	108-38-3	0.1 - <1%
BENZENE, 1,2-DIMETHYL	95-47-6	0.1 - <1%
CUMENE (SKIN)	98-82-8	0.1 - <1%

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician.
<b>Inhalation</b>	Remove to fresh air. Oxygen or artificial respiration if needed.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

##### Most important symptoms and effects, both acute and delayed

**Notes to physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

**Hazardous combustion products** Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Aldehydes. Chlorine. Fluorine.

##### Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition. Ensure adequate ventilation.

### Environmental Precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

### Methods and material for containment and cleaning up

**Methods for containment** Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

**Methods for cleaning up** If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Incompatible products** Acids. Bases. Amines. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
TALC (RESPIRABLE DUST) 14807-96-6	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	1000 mg/m <sup>3</sup>
BARIUM SULFATE (TOTAL DUST) 7727-43-7	TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	
XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>	
METHYL ISOBUTYL KETONE 108-10-1	TWA: 20 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 205 mg/m <sup>3</sup> STEL: 75 ppm STEL: 300 mg/m <sup>3</sup> TWA: 100 ppm TWA: 410 mg/m <sup>3</sup>	500 ppm
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>	800 ppm

BENZENE, 1,4-DIMETHYL 106-42-3	TWA: 100 ppm STEL: 150 ppm	-	900 ppm
BENZENE, 1,3-DIMETHYL 108-38-3	TWA: 100 ppm STEL: 150 ppm	-	900 ppm
BENZENE, 1,2-DIMETHYL 95-47-6	TWA: 100 ppm STEL: 150 ppm	-	900 ppm
CUMENE (SKIN) 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> Skin	900 ppm

**Appropriate engineering controls****Engineering measures**

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

**Skin and body protection**

Wear protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection**

Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	aromatic
<b>Appearance</b>	opaque	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>		No data available
<b>Melting point / freezing point</b>	No data available	No data available
<b>Boiling point / boiling range</b>		
<b>Flash point</b>	35 °C / 95.0 °F	Pensky Martens - Closed Cup
<b>Evaporation rate</b>		No data available
<b>Flammability (solid, gas)</b>	No data available	No information available
<b>Flammability Limit in Air</b>		approximate
<b>Upper flammability limit</b>	12.3	
<b>Lower flammability limit</b>	0.9	
<b>Vapor pressure</b>		No data available
<b>Vapor density</b>		No data available
<b>Specific gravity</b>	1.44716	g/cm <sup>3</sup>
<b>Water solubility</b>	Insoluble in cold water	
<b>Solubility in other solvents</b>		No data available
<b>Partition coefficient: n-octanol/water</b>		No data available
<b>Autoignition temperature</b>	No data available	No data available
<b>Decomposition temperature</b>		No data available

**Kinematic viscosity** No data available  
**Dynamic viscosity** No data available

**Other Information**

**Density** 12.06934  
**Volatile organic compounds (VOC) content** 2.11938  
**Total volatiles weight percent** 17.56 %  
**Total volatiles volume percent** 29.86 %  
**Bulk density** No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Acids, Bases, Amines, Strong oxidizing agents

**Hazardous decomposition products**

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Aldehydes. Chlorine. Fluorine.

## 11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**

**Inhalation** HARMFUL BY INHALATION.  
**Eye contact** Causes serious eye irritation.  
**Skin contact** Irritating to skin. May cause sensitization by skin contact.  
**Ingestion** Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
BARIUM SULFATE (TOTAL DUST) 7727-43-7	= 307000 mg/kg ( Rat )	-	-
XYLENE 1330-20-7	= 3500 mg/kg ( Rat )	> 1700 mg/kg ( Rabbit ) > 4350 mg/kg ( Rabbit )	= 29.08 mg/L ( Rat ) 4 h = 5000 ppm ( Rat ) 4 h
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg ( Rat )	= 3000 mg/kg ( Rabbit )	= 8.2 mg/L ( Rat ) 4 h
AROMATIC HYDROCARBON MIXTURE 64742-95-6	= 8400 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 3400 ppm ( Rat ) 4 h
1,2,4-TRIMETHYLBENZENE 95-63-6	= 3280 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 18 g/m <sup>3</sup> ( Rat ) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg ( Rat )	= 15400 mg/kg ( Rabbit )	= 17.4 mg/L ( Rat ) 4 h
BENZENE, 1,4-DIMETHYL 106-42-3	= 4029 mg/kg ( Rat )	-	= 4550 ppm ( Rat ) 4 h = 4740 ppm ( Rat ) 4 h
1,3,5-TRIMETHYLBENZENE 108-67-8	= 5000 mg/kg ( Rat )	-	= 24 g/m <sup>3</sup> ( Rat ) 4 h

BENZENE, 1,3-DIMETHYL 108-38-3	= 5 g/kg ( Rat )	= 12.18 g/kg ( Rabbit ) = 14100 µL/kg ( Rabbit )	= 5984 ppm ( Rat ) 6 h
BENZENE, 1,2-DIMETHYL 95-47-6	= 3608 mg/kg ( Rat )	= 14100 mg/kg ( Rabbit )	= 4330 ppm ( Rat ) 6 h
CUMENE (SKIN) 98-82-8	= 1400 mg/kg ( Rat )	= 12300 µL/kg ( Rabbit )	= 39000 mg/m <sup>3</sup> ( Rat ) 4 h > 3577 ppm ( Rat ) 6 h

**Information on toxicological effects**

**Symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Irritating to skin.  
**Eye damage/irritation** Irritating to eyes.  
**Chronic Toxicity** NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Skin sensitizer. May cause cancer. Substances known to be mutagenic to man. Substances known to impair fertility.  
**Sensitization** May cause sensitization of susceptible persons.  
**Mutagenicity** May cause genetic defects.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
TALC (RESPIRABLE DUST) 14807-96-6		Group 2B Group 3	-	
XYLENE 1330-20-7		Group 3	-	
METHYL ISOBUTYL KETONE 108-10-1	A3	Group 2B	-	X
ETHYL BENZENE 100-41-4	A3	Group 2B	-	X
BENZENE, 1,4-DIMETHYL 106-42-3		Group 3	-	
BENZENE, 1,3-DIMETHYL 108-38-3		Group 3	-	
BENZENE, 1,2-DIMETHYL 95-47-6		Group 3	-	
CUMENE (SKIN) 98-82-8		Group 2B	Reasonably Anticipated	X

**Reproductive effects** Suspected of damaging fertility or the unborn child.  
**STOT - single exposure** No information available  
**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure  
**Target organ effects** Central nervous system, Central Vascular System (CVS), Eyes, Lungs, respiratory system, Skin, blood, Gastrointestinal tract, kidney, liver.

**Aspiration hazard** No information available.

**Acute Toxicity** 26.1844305 % of the mixture consists of ingredient(s) of unknown toxicity.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects

18.01842 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
TALC (RESPIRABLE DUST) 14807-96-6		100: 96 h Brachydanio rerio g/L LC50 semi-static	
EPOXY RESIN (LER) 25085-99-8	11 mg/L 72 hr	2 mg/L 96 hr Oncorhynchus mykiss	1.8 mg/L 48h
XYLENE 1330-20-7		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h

		mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h	
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L EC50
AROMATIC HYDROCARBON MIXTURE 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/L EC50
1,2,4-TRIMETHYLBENZENE 95-63-6		7.19 - 8.28: 96 h Pimephales promelas mg/L LC50 flow-through	6.14: 48 h Daphnia magna mg/L EC50
ETHYL BENZENE 100-41-4	4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	1.8 - 2.4: 48 h Daphnia magna mg/L EC50
BENZENE, 1,4-DIMETHYL 106-42-3	105.1: 3 h Chlorella vulgaris mg/L EC50 3.2: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	7.2 - 9.9: 96 h Pimephales promelas mg/L LC50 static 2.6: 96 h Oncorhynchus mykiss mg/L LC50 8.8: 96 h Poecilia reticulata mg/L LC50 semi-static 2.6: 96 h Oncorhynchus mykiss mg/L LC50 static	3.55 - 6.31: 48 h Daphnia magna mg/L EC50 Static
1,3,5-TRIMETHYLBENZENE 108-67-8		3.48: 96 h Pimephales promelas mg/L LC50	50: 24 h Daphnia magna mg/L EC50
BENZENE, 1,3-DIMETHYL 108-38-3	4.9: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	14.3 - 18: 96 h Pimephales promelas mg/L LC50 flow-through 8.4: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 12.9: 96 h Poecilia reticulata mg/L LC50 semi-static	2.81 - 5.0: 48 h Daphnia magna mg/L EC50 Static
BENZENE, 1,2-DIMETHYL 95-47-6	4.2: 192 h Pseudokirchneriella subcapitata mg/L EC50 4.7: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	11.6 - 22.4: 96 h Pimephales promelas mg/L LC50 flow-through 11.6 - 22.4: 96 h Lepomis macrochirus mg/L LC50 flow-through 5.59 - 11.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12: 96 h Poecilia reticulata mg/L LC50	2.61 - 5.59: 48 h Daphnia magna mg/L EC50 Flow through 3.2: 48 h Daphnia magna mg/L EC50 0.78 - 2.51: 48 h Daphnia magna mg/L EC50 Static
CUMENE (SKIN) 98-82-8	2.6: 72 h Pseudokirchneriella subcapitata mg/L EC50	4.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 5.1: 96 h Poecilia reticulata mg/L LC50 semi-static 6.04 - 6.61: 96 h Pimephales promelas mg/L LC50 flow-through 2.7: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	7.9 - 14.1: 48 h Daphnia magna mg/L EC50 Static 0.6: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility in Environmental Media**

Chemical name	log Pow
EPOXY RESIN (LER) 25085-99-8	3
XYLENE 1330-20-7	2.77
METHYL ISOBUTYL KETONE 108-10-1	1.19
1,2,4-TRIMETHYLBENZENE 95-63-6	3.63
ETHYL BENZENE 100-41-4	3.118
BENZENE, 1,4-DIMETHYL 106-42-3	3.15
BENZENE, 1,3-DIMETHYL 108-38-3	3.2
BENZENE, 1,2-DIMETHYL 95-47-6	3.12
CUMENE (SKIN) 98-82-8	3.55

**Other Adverse Effects** No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

#### Disposal Methods

Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

#### Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE 1330-20-7		Included in waste stream: F039		U239
METHYL ISOBUTYL KETONE 108-10-1		Included in waste stream: F039		U161
ETHYL BENZENE 100-41-4		Included in waste stream: F039		
CUMENE (SKIN) 98-82-8				U055

Chemical name	CAWAST
XYLENE 1330-20-7	Toxic Ignitable
ETHYL BENZENE 100-41-4	Toxic Ignitable
CUMENE (SKIN) 98-82-8	Toxic Ignitable

### 14. TRANSPORT INFORMATION

#### DOT

UN/ID no. 1263  
 Proper Shipping Name PAINT  
 Hazard Class 3  
 Packing Group III  
 Emergency Response Guide Number 128

**Additional information**

Call TNE MEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Does Not Comply
<b>ENCS</b>	Does Not Comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):**

<b>Chemical name</b>	<b>HAPS Data</b>
XYLENE	
METHYL ISOBUTYL KETONE	
ETHYL BENZENE	
BENZENE, 1,4-DIMETHYL	
BENZENE, 1,3-DIMETHYL	
BENZENE, 1,2-DIMETHYL	
CUMENE (SKIN)	

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

<b>Chemical name</b>	<b>SARA 313 - Threshold Values</b>
BARIUM SULFATE (TOTAL DUST) - 7727-43-7	1.0
XYLENE - 1330-20-7	1.0
METHYL ISOBUTYL KETONE - 108-10-1	1.0
1,2,4-TRIMETHYLBENZENE - 95-63-6	1.0
ETHYL BENZENE - 100-41-4	0.1
BENZENE, 1,4-DIMETHYL - 106-42-3	1.0
BENZENE, 1,3-DIMETHYL - 108-38-3	1.0
BENZENE, 1,2-DIMETHYL - 95-47-6	1.0
CUMENE (SKIN) - 98-82-8	1.0

**SARA 311/312 Hazardous**

**Categorization**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

<b>Chemical name</b>	<b>CWA - Reportable Quantities</b>	<b>CWA - Toxic Pollutants</b>	<b>CWA - Priority Pollutants</b>	<b>CWA - Hazardous Substances</b>
XYLENE 1330-20-7	100 lb			X

ETHYL BENZENE 100-41-4	1000 lb	X	X	X
BENZENE, 1,4-DIMETHYL 106-42-3				X
BENZENE, 1,3-DIMETHYL 108-38-3				X
BENZENE, 1,2-DIMETHYL 95-47-6				X

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs	RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
METHYL ISOBUTYL KETONE 108-10-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ETHYL BENZENE 100-41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
BENZENE, 1,4-DIMETHYL 106-42-3	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
BENZENE, 1,3-DIMETHYL 108-38-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
BENZENE, 1,2-DIMETHYL 95-47-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
CUMENE (SKIN) 98-82-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**California Prop. 65**

**WARNING:** This product can expose you to the following chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical name	California Prop. 65
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen Developmental
AROMATIC HYDROCARBON MIXTURE - 64742-95-6	*
ETHYL BENZENE - 100-41-4	Carcinogen
BENZENE, 1,3-DIMETHYL - 108-38-3	*
BENZENE, 1,2-DIMETHYL - 95-47-6	*
CUMENE (SKIN) - 98-82-8	Carcinogen
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen

**California SCAQMD Rule 443**

Contains Photochemically Reactive Solvent

**State Right-to-Know**

Chemical name	New Jersey	Massachusetts	Pennsylvania
TALC (RESPIRABLE DUST) 14807-96-6	X	X	X
BARIUM SULFATE (TOTAL DUST) 7727-43-7	X	X	X
XYLENE 1330-20-7	X	X	X
METHYL ISOBUTYL KETONE 108-10-1	X	X	X
1,2,4-TRIMETHYLBENZENE 95-63-6	X	X	X
ETHYL BENZENE 100-41-4	X	X	X
BENZENE, 1,4-DIMETHYL 106-42-3	X	X	X
1,3,5-TRIMETHYLBENZENE 108-67-8		X	
BENZENE, 1,3-DIMETHYL 108-38-3	X	X	X
BENZENE, 1,2-DIMETHYL 95-47-6	X	X	X
CUMENE (SKIN)	X	X	X

98-82-8			
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**16. OTHER INFORMATION**

<b>NFPA</b>	Health 2	Flammability 3	Instability 1	Physical hazard *
<b>HMIS (Hazardous Material Information System)</b>	Health 2*	Flammability 3	Reactivity 1	

Prepared By Tnemec Regulatory Dept: 816-474-3400  
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**Disclaimer**  
 For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

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End of SDS