



# Material Safety Data Sheet

Preparation Date: 07-Jul-2009

Revision Date: 07-Jul-2009

Revision Number: 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code** F141-WH03A  
**Trade Name** EPOXOLINE OFF WHITE  
**Contact Manufacturer** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372  
**Emergency Telephone Number** 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### DANGER!

FLAMMABLE LIQUID AND VAPOR.  
HARMFUL IF INHALED.  
CAUSES SKIN AND EYE BURNS.  
HARMFUL OR FATAL IF SWALLOWED.  
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

#### Potential Health Effects

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

#### Acute Effects

**Eyes** Causes burns.  
**Skin** Causes burns. May cause sensitization by skin contact.  
**Inhalation** Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.  
**Ingestion** May be harmful if swallowed.

#### Chronic Effects

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. Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure.)

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** Central nervous system. Kidney disorders. Liver disorders. Skin disorders. Gastrointestinal tract.

**Interactions with Other Chemicals** Use of alcoholic beverages may enhance toxic effects.

**Potential Environmental Effects** See Section 12 for additional Ecological information

**Target Organ Effects** Central nervous system, Central Vascular System, Eyes, Kidney, Liver, Lungs, Respiratory system, Skin, Blood, Gastrointestinal tract

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Component	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	25.94607
TALC (RESPIRABLE DUST)	14807-96-6	20.5928
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	11.60341
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	7.02451
XYLENE	1330-20-7	6.317943
BENZYL ALCOHOL	100-51-6	3.272296
MICA (RESPIRABLE DUST)	12001-26-2	2.996187
MODIFIED ALIPHATIC AMINE	1477-55-0	1.861554
ETHYL BENZENE	100-41-4	1.579288
N-BUTANOL (SKIN)	71-36-3	1.570746
AMORPHOUS SILICA	7631-86-9	1.43252
ALUMINUM OXIDES	1344-28-1	1.289268
ETHYLENEDIAMINE	107-15-3	0.1888675

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Flammable.
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical
<b>Hazardous Decomposition Products</b>	Oxides of carbon, hydrocarbons. Oxides of nitrogen. Ammonia.

#### 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.

#### 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

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**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.

**Other Information** Not applicable

**7. HANDLING AND STORAGE**

**Handling**

Close container after each use. Avoid contact with skin, eyes 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.

**Storage**

Keep away from heat, sparks and flame. VAPORS MAY CAUSE FLASH FIRE. Use only in an area containing flame proof equipment. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
CRYSTALLINE SILICA (QUARTZ)	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
TALC (RESPIRABLE DUST)	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
TITANIUM DIOXIDE (TOTAL DUST)	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
CRYSTALLINE SILICA (QUARTZ)	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
XYLENE	TWA: 100 ppm STEL: 150 ppm	TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>	TWA: 434 mg/m <sup>3</sup> TWA: 100 ppm STEL: 150 ppm STEL: 651 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 150 ppm STEL: 650 mg/m <sup>3</sup>	TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>
MICA (RESPIRABLE DUST)	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>
MODIFIED ALIPHATIC AMINE	Skin Ceiling: 0.1 mg/m <sup>3</sup>	Skin Ceiling: 0.1 mg/m <sup>3</sup>	Ceiling: 0.1 mg/m <sup>3</sup> Skin	CEV: 0.1 mg/m <sup>3</sup> Skin	Peak: 0.1 mg/m <sup>3</sup>
ETHYL BENZENE	TWA: 100 ppm STEL: 125 ppm	TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm STEL: 545 mg/m <sup>3</sup> STEL: 125 ppm	TWA: 434 mg/m <sup>3</sup> TWA: 100 ppm STEL: 125 ppm STEL: 543 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 540 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>
N-BUTANOL (SKIN)	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m <sup>3</sup> TWA: 100 ppm TWA: 300 mg/m <sup>3</sup>	Ceiling: 152 mg/m <sup>3</sup> Ceiling: 50 ppm Skin	TWA: 20 ppm	Peak: 150 mg/m <sup>3</sup> Peak: 50 ppm
ALUMINUM OXIDES	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>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
ETHYLENEDIAMINE	TWA: 10 ppm Skin	TWA: 25 mg/m <sup>3</sup> TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> Skin	TWA: 25 mg/m <sup>3</sup> TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>

<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas
<b>Personal Protective Equipment</b>	
<b>Skin Protection</b> <b>Eye/face Protection</b> <b>Respiratory Protection</b>	Lightweight protective clothing, Apron, Impervious gloves Goggles. If splashes are likely to occur, wear face-shield. <b>Use only with adequate ventilation.</b> Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Flash Point</b>	33°C / 91.0°F
<b>Method</b>	Pensky Martens - Closed Cup
<b>Boiling Point/Range</b>	116 - 142°C / 241.0 - 288.0°F
<b>Upper Exposure Limits</b>	No information available
<b>Lower Exposure Limits</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Vapour Pressure</b>	No information available
<b>Vapour Density</b>	No information available
<b>Specific Gravity</b>	1.83451
<b>Density</b>	15.26589
<b>VOC Content (lbs/gal)</b>	1.604
<b>% Volatile by Weight</b>	10.5120
<b>% Volatile by Volume</b>	22.2246

**10. STABILITY AND REACTIVITY**

<b>Chemical stability</b>	Stable.	<b>Conditions to Avoid</b>	Heat, flames and sparks. Epoxy constituents.
<b>Incompatible Products</b>	Strong oxidizing agents. Bases. Acids.	<b>Possibility of Hazardous Reactions</b>	None under normal processing

**11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity**

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg ( Rat )		
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg ( Rat )		
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg ( Rat )		
XYLENE	4300 mg/kg ( Rat )	1700 mg/kg ( Rabbit )	47635 mg/L ( Rat ) 4 h 5000 ppm ( Rat ) 4 h
BENZYL ALCOHOL	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h
MODIFIED ALIPHATIC AMINE	930 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	700 ppm ( Rat ) 1 h
ETHYL BENZENE	3500 mg/kg ( Rat )	15354 mg/kg ( Rabbit )	17.2 mg/L ( Rat ) 4 h
N-BUTANOL (SKIN)	790 mg/kg ( Rat )	3400 mg/kg ( Rabbit )	8000 ppm ( Rat ) 4 h 17.7 mg/L ( Rat ) 4 h
AMORPHOUS SILICA	5000 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	2.2 mg/L ( Rat ) 1 h
ALUMINUM OXIDES	5000 mg/kg ( Rat )		

11. TOXICOLOGICAL INFORMATION			
ETHYLENEDIAMINE	637 mg/kg ( Rat )	1000 mg/kg ( Rat ) 550 mg/kg ( Rabbit )	

**Irritation** No information available  
**Corrosivity** No information available  
**Sensitization** No information available

**Chronic Toxicity**

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	ACGIH	IARC	NTP	OSHA	Mexico
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		X	
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
ETHYL BENZENE	A3	Group 2B		X	

**Mutagenic Effects** No information available  
**Reproductive Effects** No information available  
**Developmental Effects** No information available  
**Teratogenicity** No information available  
**Target Organ Effects** Central nervous system, Central Vascular System, Eyes, Kidney, Liver, Lungs, Respiratory system, Skin, Blood, Gastrointestinal tract.  
**Endocrine Disruptor Information** No information available

12. ECOLOGICAL INFORMATION
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**Ecotoxicity**

. May cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
TALC (RESPIRABLE DUST)		LC50> 100 g/L Brachydanio rerio 96 h		
XYLENE		LC50= 13.4 mg/L Pimephales promelas 96 h LC50= 8.05 mg/L Oncorhynchus mykiss 96 h LC50= 16.1 mg/L Lepomis macrochirus 96 h LC50= 26.7 mg/L Pimephales promelas 96 h	EC50 = 0.0084 mg/L 24 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
BENZYL ALCOHOL	EC50 = 35 mg/L 3 h	LC50= 460 mg/L Pimephales promelas 96 h LC50= 10 mg/L Lepomis macrochirus 96 h	EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min	EC50 = 23 mg/L 48 h
ETHYL BENZENE	EC50 = 4.6 mg/L 72 h EC50 > 438 mg/L 96 h	LC50= 14.0 mg/L Oncorhynchus mykiss 96 h LC50= 9.09 mg/L Pimephales promelas 96 h LC50= 150.0 mg/L Lepomis macrochirus 96 h LC50= 4.2 mg/L Oncorhynchus mykiss 96 h LC50= 32 mg/L Lepomis macrochirus 96 h LC50= 48.5 mg/L Pimephales promelas 96 h LC50= 9.6 mg/L Poecilia reticulata 96 h	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50 1.8 - 2.4 mg/L 48 h

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
N-BUTANOL (SKIN)	EC50 > 500 mg/L 96 h EC50 > 500 mg/L 72 h	LC50= 1510 mg/L Pimephales promelas 96 h LC50= 1740 mg/L Pimephales promelas 96 h LC50= 1200 mg/L Leuciscus idus 96 h	EC50 = 2041.4 mg/L 5 min EC50 = 2186 mg/L 30 min EC50 = 4400 mg/L 17 h EC50 = 3980 mg/L 24 h	EC50 = 1983 mg/L 48 h
AMORPHOUS SILICA	EC50 = 440 mg/L 72 h	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h
ETHYLENEDIAMINE	EC50 = 645 mg/L 72 h EC50 = 151 mg/L 96 h	LC50= 115.7 mg/L Pimephales promelas 96 h LC50= 230 mg/L Oncorhynchus mykiss 96 h	EC50 = 20 mg/L 15 min EC50 = 29 mg/L 17 h	EC50 = 0.88 mg/L 48 h

**13. DISPOSAL CONSIDERATIONS**

**Waste 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 for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION**

**DOT** Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

**Proper Shipping Name**

UN1263, PAINT, 3, PGIII, ERG 128

**15. REGULATORY INFORMATION**

**International Inventories**

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

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following HAPs:

**Component**

XYLENE  
ETHYL BENZENE

**U.S. Federal Regulations**

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values
XYLENE	1330-20-7	6.317943	1.0
ETHYL BENZENE	100-41-4	1.579288	0.1
N-BUTANOL (SKIN)	71-36-3	1.570746	1.0

**SARA 311/312 Hazardous Categorization**

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

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE	100 lb			X
ETHYL BENZENE	1000 lb	X	X	X
ETHYLENEDIAMINE	5000 lb			X

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
XYLENE	100 lb	
ETHYL BENZENE	1000 lb	
N-BUTANOL (SKIN)	5000 lb	
ETHYLENEDIAMINE	5000 lb	5000 lb

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen
ETHYL BENZENE	100-41-4	Carcinogen

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
TALC (RESPIRABLE DUST)	X	X	X		X
TITANIUM DIOXIDE (TOTAL DUST)	X	X	X		X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
XYLENE	X	X	X	X	X
BENZYL ALCOHOL	X		X		
MICA (RESPIRABLE DUST)	X	X	X		X
MODIFIED ALIPHATIC AMINE	X	X	X		X
ETHYL BENZENE	X	X	X	X	X
N-BUTANOL (SKIN)	X	X	X		X
AMORPHOUS SILICA	X		X		
ALUMINUM OXIDES	X	X	X		X
ETHYLENEDIAMINE	X	X	X		X

**Other International Regulations**

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**  
 B2 Flammable liquid  
 D2A Very toxic materials  
 E Corrosive material



Component	NPRI
XYLENE	Part 1, Group 1 Substance; Part 5 Substance
ETHYL BENZENE	Part 1, Group 1 Substance
N-BUTANOL (SKIN)	Part 1, Group 1 Substance
ALUMINUM OXIDES	Part 1, Group 1 Substance (fibrous form)

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

**Revision Date:** 07-Jul-2009

**Revision Summary** No information available

**HMIS**                                      **Health** 0                                      **Flammability** 0                                      **Reactivity** 1

**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 MSDS**



# Material Safety Data Sheet

Preparation Date: 30-Dec-2009

Revision Date: 29-Dec-2009

Revision Number: 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code** F141-0141B  
**Trade Name** EPOXOLINE CONVERTER  
**Contact Manufacturer** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372  
**Emergency Telephone Number** 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### DANGER!

COMBUSTIBLE LIQUID AND VAPOR.  
HARMFUL IF INHALED.  
HARMFUL OR FATAL IF SWALLOWED.  
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

#### Potential Health Effects

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

#### Acute Effects

**Eyes** Moderately irritating to the eyes.  
**Skin** Irritating to skin. May cause sensitization by skin contact.  
**Inhalation** Irritating to respiratory system.  
**Ingestion** May be harmful if swallowed.

#### Chronic Effects

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.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** Central nervous system. Kidney disorders. Liver disorders. Skin disorders.

**Interactions with Other Chemicals** Use of alcoholic beverages may enhance toxic effects.

**Potential Environmental Effects** See Section 12 for additional Ecological information

**Target Organ Effects** Central nervous system, Eyes, Kidney, Liver, Respiratory system, Skin

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
BISPHENOL A TYPE EPOXY RESIN	25085-99-8	60 - 100
METHYL ISOBUTYL KETONE	108-10-1	5.3643
XYLENE	1330-20-7	1.652
ETHYL BENZENE	100-41-4	0.413

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Inhalation</b>	Move to fresh air. Oxygen or artificial respiration if needed.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Combustible material.
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical

**Hazardous Decomposition Products** Oxides of carbon, hydrocarbons. Aldehydes.

**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.

**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

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for Cleaning Up</b>	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.
<b>Other Information</b>	Not applicable

### 7. HANDLING AND STORAGE

**Handling**

Close container after each use. Avoid contact with skin, eyes 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.

**Storage**

Keep away from heat, sparks and flame. Use only in an area containing flame proof equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
METHYL ISOBUTYL KETONE	TWA: 50 ppm STEL: 75 ppm	TWA: 205 mg/m <sup>3</sup> TWA: 50 ppm STEL: 300 mg/m <sup>3</sup> STEL: 75 ppm TWA: 100 ppm TWA: 410 mg/m <sup>3</sup>	TWA: 205 mg/m <sup>3</sup> TWA: 50 ppm STEL: 307 mg/m <sup>3</sup> STEL: 75 ppm	TWA: 205 mg/m <sup>3</sup> TWA: 50 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 205 mg/m <sup>3</sup> STEL: 307 mg/m <sup>3</sup> STEL: 75 ppm
XYLENE	TWA: 100 ppm STEL: 150 ppm	TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>	TWA: 434 mg/m <sup>3</sup> TWA: 100 ppm STEL: 150 ppm STEL: 651 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 150 ppm STEL: 650 mg/m <sup>3</sup>	TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>
ETHYL BENZENE	TWA: 100 ppm STEL: 125 ppm	TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm STEL: 545 mg/m <sup>3</sup> STEL: 125 ppm	TWA: 434 mg/m <sup>3</sup> TWA: 100 ppm STEL: 125 ppm STEL: 543 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 540 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment**

**Skin Protection**

Lightweight protective clothing, Apron, Impervious gloves

**Eye/face Protection**

If splashes are likely to occur, wear Goggles.

**Respiratory Protection**

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

Flash Point	44°C / 111.0°F
Method	Pensky Martens - Closed Cup
Boiling Point/Range	114 - 142°C / 237.0 - 288.0°F
Upper Exposure Limits	No information available
Lower Exposure Limits	No information available
Evaporation Rate	No information available
Vapour Pressure	No information available
Vapour Density	No information available
Specific Gravity	1.12498
Density	9.36156
VOC Content (lbs/gal)	.696
% Volatile by Weight	7.4290
% Volatile by Volume	10.1962

**10. STABILITY AND REACTIVITY**

10. STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable.	<b>Conditions to Avoid</b>	Heat, flames and sparks. Amines.
<b>Incompatible Products</b>	Strong oxidizing agents. Bases. Acids. Amines.	<b>Possibility of Hazardous Reactions</b>	None under normal processing

11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ISOBUTYL KETONE	2080 mg/kg ( Rat )	16000 mg/kg ( Rabbit )	8.2 mg/L ( Rat ) 4 h
XYLENE	4300 mg/kg ( Rat )	1700 mg/kg ( Rabbit )	47635 mg/L ( Rat ) 4 h 5000 ppm ( Rat ) 4 h
ETHYL BENZENE	3500 mg/kg ( Rat )	15354 mg/kg ( Rabbit )	17.2 mg/L ( Rat ) 4 h

<b>Irritation</b>	No information available
<b>Corrosivity</b>	No information available
<b>Sensitization</b>	No information available

**Chronic Toxicity**

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	ACGIH	IARC	NTP	OSHA	Mexico
ETHYL BENZENE	A3	Group 2B		X	

<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available
<b>Developmental Effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Target Organ Effects</b>	Central nervous system, Eyes, Kidney, Liver, Respiratory system, Skin.
<b>Endocrine Disruptor Information</b>	No information available

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
BISPHENOL A TYPE EPOXY RESIN	Group III Chemical		

12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
METHYL ISOBUTYL KETONE	EC50 = 400 mg/L 96 h	LC50= 505 mg/L Pimephales promelas 96 h	EC50 = 79.6 mg/L 5 min	EC50 = 4280.0 mg/L 24 h EC50 = 170 mg/L 48 h
XYLENE		LC50= 13.4 mg/L Pimephales promelas 96 h LC50= 8.05 mg/L Oncorhynchus mykiss 96 h LC50= 16.1 mg/L Lepomis macrochirus 96 h LC50= 26.7 mg/L Pimephales promelas 96 h	EC50 = 0.0084 mg/L 24 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
ETHYL BENZENE	EC50 = 4.6 mg/L 72 h EC50 > 438 mg/L 96 h	LC50= 14.0 mg/L Oncorhynchus mykiss 96 h LC50= 9.09 mg/L Pimephales promelas 96 h LC50= 150.0 mg/L Lepomis macrochirus 96 h LC50= 4.2 mg/L Oncorhynchus mykiss 96 h LC50= 32 mg/L Lepomis macrochirus 96 h LC50= 48.5 mg/L Pimephales promelas 96 h LC50= 9.6 mg/L Poecilia reticulata 96 h	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50 1.8 - 2.4 mg/L 48 h

**13. DISPOSAL CONSIDERATIONS**

**Waste 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 for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION**

**DOT Ground Transportation Only.** Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.  
**Proper Shipping Name** PAINT IN OIL

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Does not Comply
CHINA	Complies
ENCS	Does not Comply
KECL	Complies
PICCS	Complies
AICS	Complies

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following HAPs:

**Component**  
METHYL ISOBUTYL KETONE  
XYLENE  
ETHYL BENZENE

**U.S. Federal Regulations**

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values
METHYL ISOBUTYL KETONE	108-10-1	5.3643	1.0
XYLENE	1330-20-7	1.652	1.0
ETHYL BENZENE	100-41-4	0.413	0.1

**SARA 311/312 Hazardous Categorization**

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

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE	100 lb			X
ETHYL BENZENE	1000 lb	X	X	X

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
METHYL ISOBUTYL KETONE	5000 lb	
XYLENE	100 lb	
ETHYL BENZENE	1000 lb	

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
ETHYL BENZENE	100-41-4	Carcinogen

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
METHYL ISOBUTYL KETONE	X	X	X	X	X
XYLENE	X	X	X	X	X
ETHYL BENZENE	X	X	X	X	X

**Other International Regulations**

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

B3 Combustible liquid  
 D2A Very toxic materials



Component	NPRI
METHYL ISOBUTYL KETONE	Part 1, Group 1 Substance; Part 5 Substance
XYLENE	Part 1, Group 1 Substance; Part 5 Substance
ETHYL BENZENE	Part 1, Group 1 Substance

**Legend**

NPRI - National Pollutant Release Inventory

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16. OTHER INFORMATION
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Revision Date: 29-Dec-2009

Revision Summary No information available

HMIS                      Health 2                      Flammability 2                      Reactivity 1

**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 or 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 MSDS**