



Material Safety Data Sheet

Preparation Date: 04-Jan-2010

Revision Date: 29-Dec-2009

Revision Number: 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code L-69-11WHA
Trade Name HB EPOXOLINE II WHITE
Contact Manufacturer Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
Emergency Telephone Number 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

COMBUSTIBLE LIQUID AND VAPOR.
HARMFUL IF INHALED.
HARMFUL OR FATAL IF SWALLOWED.
CAUSES SKIN AND EYE BURNS.
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. 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, Central Vascular System, Eyes, Lungs, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
TALC (RESPIRABLE DUST)	14807-96-6	10 - 30
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - 30
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	98-56-6	17.9384
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	13.096
MODIFIED CYCLOALIPHATIC POLYAMINE		5 - 10
BENZYL ALCOHOL	100-51-6	5.1455
N-BUTANOL (SKIN)	71-36-3	3.8247
ISOPHORONE DIAMINE	2855-13-2	1 - 5
AMORPHOUS SILICA	7631-86-9	1 - 5
ALUMINUM OXIDES	1344-28-1	1 - 5
1,2,4-TRIMETHYLBENZENE	95-63-6	0.6246
XYLENE	1330-20-7	0.3195
1,3,5-TRIMETHYLBENZENE	108-67-8	0.1561

4. FIRST AID MEASURES

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

5. FIRE-FIGHTING MEASURES

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

Hazardous Decomposition Products Oxides of carbon, hydrocarbons. Oxides of nitrogen. Aldehydes. Chlorine. Fluorine.

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

Personal Precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental Precautions	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. 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)
TALC (RESPIRABLE DUST)	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 3 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³
TITANIUM DIOXIDE (TOTAL DUST)	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	TWA: 2.5 mg/m ³		TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	
CRYSTALLINE SILICA (QUARTZ)	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
N-BUTANOL (SKIN)	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m ³ TWA: 100 ppm TWA: 300 mg/m ³	Ceiling: 152 mg/m ³ Ceiling: 50 ppm Skin	TWA: 20 ppm	Peak: 150 mg/m ³ Peak: 50 ppm
ALUMINUM OXIDES	TWA: 1 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
1,2,4-TRIMETHYLBENZENE	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 125 mg/m ³ TWA: 25 ppm STEL: 170 mg/m ³ STEL: 35 ppm
XYLENE	TWA: 100 ppm STEL: 150 ppm	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m ³	TWA: 434 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 650 mg/m ³	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m ³
1,3,5-TRIMETHYLBENZENE	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 125 mg/m ³ TWA: 25 ppm STEL: 170 mg/m ³ STEL: 35 ppm

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	41°C / 105.0°F
Boiling Point/Range	116 - 118°C / 241.0 - 245.0°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	1.76428
Density	14.68149
VOC Content (lbs/gal)	1.232
% Volatile by Weight	24.2450
% Volatile by Volume	36.7682

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to Avoid	Heat, flames and sparks. Epoxy constituents.
Incompatible Products	Strong oxidizing agents. Bases. Acids. Cleaning solutions such as Chromerge and Aqua Regia.	Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	13 g/kg (Rat)	2 mg/kg (Rabbit)	33 mg/L (Rat) 4 h
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
BENZYL ALCOHOL	1230 mg/kg (Rat)	2000 mg/kg (Rabbit)	8.8 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
ISOPHORONE DIAMINE	1030 mg/kg (Rat)		
AMORPHOUS SILICA	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.2 mg/L (Rat) 1 h
ALUMINUM OXIDES	5000 mg/kg (Rat)		
1,2,4-TRIMETHYLBENZENE	3400 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m ³ (Rat) 4 h
XYLENE	4300 mg/kg (Rat)	1700 mg/kg (Rabbit)	47635 mg/L (Rat) 4 h 5000 ppm (Rat) 4 h
1,3,5-TRIMETHYLBENZENE	5000 mg/kg (Rat)		24 g/m ³ (Rat) 4 h

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
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		X	
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	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, Lungs, Respiratory system, Skin.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
TALC (RESPIRABLE DUST)		LC50> 100 g/L Brachydanio rerio 96 h		
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-			EC50 = 11.1 mg/L 5 min EC50 = 13.4 mg/L 15 min EC50 = 14.3 mg/L 30 min	EC50 = 3.68 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
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
ISOPHORONE DIAMINE	EC50 = 37 mg/L 72 h	LC50= 110 mg/L Leuciscus idus 96 h		EC50 = 42 mg/L 24 h
AMORPHOUS SILICA	EC50 = 440 mg/L 72 h	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h
1,2,4-TRIMETHYLBENZENE		LC50= 7.72 mg/L Pimephales promelas 96 h		EC50 = 6.14 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
1,3,5-TRIMETHYLBENZENE		LC50= 7.72 mg/L Pimephales promelas 96 h LC50= 3.48 mg/L Pimephales promelas 96 h		EC50 = 50 mg/L 24 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/NDSL	Complies
EINECS/ELINCS	Does not Comply
CHINA	Does not Comply
ENCS	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

Component
XYLENE

U.S. Federal RegulationsSARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
N-BUTANOL (SKIN)	71-36-3	3.8247	1.0
1,2,4-TRIMETHYLBENZENE	95-63-6	0.6246	1.0
XYLENE	1330-20-7	0.3195	1.0

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
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-		X		
XYLENE	100 lb			X

CERCLA

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

U.S. State RegulationsCalifornia Proposition 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
TALC (RESPIRABLE DUST)	X	X	X		X
TITANIUM DIOXIDE (TOTAL DUST)	X	X	X		X
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-		X	X		X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
BENZYL ALCOHOL	X		X		
N-BUTANOL (SKIN)	X	X	X		X
ISOPHORONE DIAMINE		X			
AMORPHOUS SILICA	X		X		
ALUMINUM OXIDES	X	X	X		X
1,2,4-TRIMETHYLBENZENE	X	X	X	X	X
XYLENE	X	X	X	X	X
1,3,5-TRIMETHYLBENZENE	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

D2B Toxic materials

E Corrosive material



Component	NPRI
N-BUTANOL (SKIN)	Part 1, Group 1 Substance
ALUMINUM OXIDES	Part 1, Group 1 Substance (fibrous form)
1,2,4-TRIMETHYLBENZENE	Part 1, Group 1 Substance; Part 5 Substance
XYLENE	Part 1, Group 1 Substance; Part 5 Substance

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date: 29-Dec-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 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



Material Safety Data Sheet

Preparation Date: 04-Jan-2010

Revision Date: 29-Dec-2009

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code L-69-0069B
Trade Name HB EPOXOLINE II 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!

FLAMMABLE LIQUID AND VAPOR.
HARMFUL IF INHALED.
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.
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.

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. 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. 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, Central Vascular System, Eyes, Lungs, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Hazardous Components

Component	CAS-No	Weight %
TALC (RESPIRABLE DUST)	14807-96-6	30 - 60
BISPHENOL A TYPE EPOXY RESIN		10 - 30
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-EPOXY RESIN	98-56-6	20.2996
CRYSTALLINE SILICA (QUARTZ)	25036-25-3	10 - 30
tert-BUTYL ACETATE	14808-60-7	5.3028
1,2,4-TRIMETHYLBENZENE	540-88-5	3.5761
XYLENE	95-63-6	0.5072
1,3,5-TRIMETHYLBENZENE	1330-20-7	0.2639
	108-67-8	0.1268

4. FIRST AID MEASURES

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

5. FIRE-FIGHTING MEASURES

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

Hazardous Decomposition Products Oxides of carbon, hydrocarbons. Aldehydes. Chlorine. Fluorine.

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

Personal Precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental Precautions	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)
TALC (RESPIRABLE DUST)	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 3 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	TWA: 2.5 mg/m ³		TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	
CRYSTALLINE SILICA (QUARTZ)	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
tert-BUTYL ACETATE	TWA: 200 ppm	TWA: 950 mg/m ³ TWA: 200 ppm	TWA: 950 mg/m ³ TWA: 200 ppm	TWA: 950 mg/m ³ TWA: 200 ppm	TWA: 950 mg/m ³ TWA: 200 ppm STEL: 250 ppm STEL: 1190 mg/m ³
1,2,4-TRIMETHYLBENZENE	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 125 mg/m ³ TWA: 25 ppm STEL: 170 mg/m ³ STEL: 35 ppm
XYLENE	TWA: 100 ppm STEL: 150 ppm	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m ³	TWA: 434 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 650 mg/m ³	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m ³
1,3,5-TRIMETHYLBENZENE	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 125 mg/m ³ TWA: 25 ppm STEL: 170 mg/m ³ STEL: 35 ppm

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

Handle in accordance with good industrial hygiene and safety practice.

Considerations

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point

35°C / 95.0°F

Boiling Point/Range

98°C / 208.0°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

1.49699

9. PHYSICAL AND CHEMICAL PROPERTIES

Density	12.45721
VOC Content (lbs/gal)	.366
% Volatile by Weight	25.9610
% Volatile by Volume	32.4136

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	13 g/kg (Rat)	2 mg/kg (Rabbit)	33 mg/L (Rat) 4 h
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
tert-BUTYL ACETATE	4100 mg/kg (Rat)	2 g/kg (Rabbit)	2230 mg/m ³ (Rat) 4 h
1,2,4-TRIMETHYLBENZENE	3400 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m ³ (Rat) 4 h
XYLENE	4300 mg/kg (Rat)	1700 mg/kg (Rabbit)	47635 mg/L (Rat) 4 h 5000 ppm (Rat) 4 h
1,3,5-TRIMETHYLBENZENE	5000 mg/kg (Rat)		24 g/m ³ (Rat) 4 h

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	

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, Lungs, Respiratory system, Skin.
Endocrine Disruptor Information	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		
EPOXY RESIN	Group III Chemical		

12. ECOLOGICAL INFORMATION

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Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
TALC (RESPIRABLE DUST)		LC50> 100 g/L Brachydanio rerio 96 h		
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-			EC50 = 11.1 mg/L 5 min EC50 = 13.4 mg/L 15 min EC50 = 14.3 mg/L 30 min	EC50 = 3.68 mg/L 48 h
tert-BUTYL ACETATE		LC50= 327 mg/L Pimephales promelas 96 h	EC50 = 6.38 mg/L 5 min EC50 = 8.04 mg/L 15 min EC50 = 11.1 mg/L 30 min	
1,2,4-TRIMETHYLBENZENE		LC50= 7.72 mg/L Pimephales promelas 96 h		EC50 = 6.14 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
1,3,5-TRIMETHYLBENZENE		LC50= 7.72 mg/L Pimephales promelas 96 h LC50= 3.48 mg/L Pimephales promelas 96 h		EC50 = 50 mg/L 24 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

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

Component
XYLENE

U.S. Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
1,2,4-TRIMETHYLBENZENE	95-63-6	0.5072	1.0
XYLENE	1330-20-7	0.2639	1.0

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
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-		X		
tert-BUTYL ACETATE				X
XYLENE	100 lb			X

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
tert-BUTYL ACETATE	5000 lb	
XYLENE	100 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

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
TALC (RESPIRABLE DUST)	X	X	X		X
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-		X	X		X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
tert-BUTYL ACETATE	X	X	X		X
1,2,4-TRIMETHYLBENZENE	X	X	X	X	X
XYLENE	X	X	X	X	X
1,3,5-TRIMETHYLBENZENE	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

B2 Flammable liquid

D2B Toxic materials



Component	NPRI
1,2,4-TRIMETHYLBENZENE	Part 1, Group 1 Substance; Part 5 Substance
XYLENE	Part 1, Group 1 Substance; Part 5 Substance

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date: 29-Dec-2009

Revision Summary No information available

HMIS	Health 0	Flammability 0	Reactivity 1
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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.

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