



Material Safety Data Sheet

Preparation Date: 30-Dec-2009

Revision Date: 29-Dec-2009

Revision Number: 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code G396-1232A
Trade Name GLASS ARMOR 960 BLUE
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

WARNING!

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.

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

Harmful by inhalation. 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 Skin disorders. Central nervous system. Gastrointestinal tract. Kidney disorders. Liver 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 Eyes, Lungs, Respiratory system, Skin, Blood, Central nervous system, Gastrointestinal tract, Kidney, Liver

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	44.0253
EPOXY RESIN	28064-14-4	30 - 60
ALUMINUM SILICATE (TOTAL DUST)	1332-58-7	5 - 10
GLYCIDYL ETHER OF 1,4 BUTANE DIOL	2425-79-8	1 - 5
XYLENE	1330-20-7	1.0276
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	0.5218
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	0.1 - 1
ETHYL BENZENE	100-41-4	0.2507

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	No information available
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. Ammonia. Nitric acid, nitrosamine. Phenolics. 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.

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

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 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
ALUMINUM SILICATE (TOTAL DUST)	TWA: 2 mg/m ³	TWA: 5 mg/m ³ TWA: 10 mg/m ³ TWA: 15 mg/m ³	TWA: 5 mg/m ³	TWA: 2 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³
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
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
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
ETHYL BENZENE	TWA: 100 ppm STEL: 125 ppm	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 545 mg/m ³ STEL: 125 ppm	TWA: 434 mg/m ³ TWA: 100 ppm STEL: 125 ppm STEL: 543 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 540 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin Protection

Lightweight protective clothing, Apron, Impervious gloves

Eye/face Protection

Goggles. If splashes are likely to occur, wear face-shield.

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

Not applicable

Boiling Point/Range

138 - 142°C / 280.0 - 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

1.43160

Density

11.91310

VOC Content (lbs/gal)

.183

% Volatile by Weight

1.5420

% Volatile by Volume

2.5501

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to Avoid	Heat, flames and sparks. Epoxy constituents.
Incompatible Products	Strong oxidizing agents. Bases. Acids. Hypochlorites. Nitrous acid and other nitrosating agents. Peroxides. Water, alcohols, amines, strong bases, metal components, surface active materials. Amines.	Possibility of Hazardous Reactions	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)		
GLYCIDYL ETHER OF 1,4 BUTANE DIOL	1134 mg/kg (Rat)	1130 mg/kg (Rabbit)	
XYLENE	4300 mg/kg (Rat)	1700 mg/kg (Rabbit)	47635 mg/L (Rat) 4 h 5000 ppm (Rat) 4 h
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
ETHYL BENZENE	3500 mg/kg (Rat)	15354 mg/kg (Rabbit)	17.2 mg/L (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	
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		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	Eyes, Lungs, Respiratory system, Skin, Blood, Central nervous system, Gastrointestinal tract, Kidney, Liver.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
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
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	Does not Comply
ENCS	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	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	1.0276	1.0
ETHYL BENZENE	100-41-4	0.2507	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
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
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
ALUMINUM SILICATE (TOTAL DUST)	X	X	X		X
XYLENE	X	X	X	X	X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
TITANIUM DIOXIDE (TOTAL DUST)	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
D2A Very toxic materials



Component	NPRI
XYLENE	Part 1, Group 1 Substance; Part 5 Substance
ETHYL BENZENE	Part 1, Group 1 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 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: 04-Jan-2010

Revision Date: 29-Dec-2009

Revision Number: 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code G396-0396B
Trade Name GLASS ARMOR 960 ACTIVATOR
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

WARNING!

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 CAUSE ALLERGIC RESPIRATORY REACTION; EFFECTS MAY BE PERMANENT.

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

Harmful by inhalation. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. May cause allergic respiratory reaction.

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 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 Eyes, Lungs, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	43.2829
POLY(METHYLENECYCLOHEXANAMINE)		10 - 30
M-XYLENEDIAMINE	135108-88-2	10 - 30
BENZYL ALCOHOL	100-51-6	11.8824
ALUMINUM SILICATE (TOTAL DUST)	1332-58-7	5 - 10
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	1 - 5
DIETHYLENE TRIAMINE	111-40-0	1 - 5
XYLENE	1330-20-7	0.6577
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	0.4991
ALUMINUM OXIDES	1344-28-1	0.1 - 1
ETHYL BENZENE	100-41-4	0.1644

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	No information available
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. Ammonia. Nitric acid, nitrosamine. Phenolics.
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.

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

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 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
ALUMINUM SILICATE (TOTAL DUST)	TWA: 2 mg/m ³	TWA: 5 mg/m ³ TWA: 10 mg/m ³ TWA: 15 mg/m ³	TWA: 5 mg/m ³	TWA: 2 mg/m ³	TWA: 10 mg/m ³ STEL: 20 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
DIETHYLENE TRIAMINE	TWA: 1 ppm Skin	TWA: 1 ppm TWA: 4 mg/m ³	TWA: 4.2 mg/m ³ TWA: 1 ppm Skin	TWA: 4 mg/m ³ TWA: 1 ppm Skin	TWA: 1 ppm TWA: 4.2 mg/m ³
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
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
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
ETHYL BENZENE	TWA: 100 ppm STEL: 125 ppm	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 545 mg/m ³ STEL: 125 ppm	TWA: 434 mg/m ³ TWA: 100 ppm STEL: 125 ppm STEL: 543 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 540 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin Protection

Lightweight protective clothing, Apron, Impervious gloves

Eye/face Protection

Goggles. If splashes are likely to occur, wear face-shield.

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

Not applicable

Boiling Point/Range

No information available.0.0

Upper Exposure Limits

No information available

Lower Exposure Limits

No information available

Evaporation Rate

No information available

Vapour Pressure

No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapour Density	No information available
Specific Gravity	1.40811
Density	11.71757
VOC Content (lbs/gal)	.316
% Volatile by Weight	2.7020
% Volatile by Volume	4.0376

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to Avoid	Heat, flames and sparks. Epoxy constituents.
Incompatible Products	Strong oxidizing agents. Bases. Acids. Hypochlorites. Nitrous acid and other nitrosating agents. Peroxides. Water, alcohols, amines, strong bases, metal components, surface active materials.	Possibility of Hazardous Reactions	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)		
BENZYL ALCOHOL	1230 mg/kg (Rat)	2000 mg/kg (Rabbit)	8.8 mg/L (Rat) 4 h
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
DIETHYLENE TRIAMINE	819 mg/kg (Rat)	672 mg/kg (Rabbit)	
XYLENE	4300 mg/kg (Rat)	1700 mg/kg (Rabbit)	47635 mg/L (Rat) 4 h 5000 ppm (Rat) 4 h
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
ALUMINUM OXIDES	5000 mg/kg (Rat)		
ETHYL BENZENE	3500 mg/kg (Rat)	15354 mg/kg (Rabbit)	17.2 mg/L (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	
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	Eyes, Lungs, Respiratory system, Skin.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
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
DIETHYLENE TRIAMINE	EC50 = 1164 mg/L 72 h EC50 = 345.6 mg/L 96 h EC50 = 592 mg/L 96 h	LC50= 430 mg/L Leuciscus idus 96 h LC50= 248 mg/L Poecilia reticulata 96 h	EC50 = 2000 mg/L 1 h EC50 = 96 mg/L 17 h	EC50 = 330 mg/L 24 h EC50 = 16 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
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 UN3066, PAINT, 8, PGIII, ERG 153

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Does not Comply

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

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	0.6577	1.0
ETHYL BENZENE	100-41-4	0.1644	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
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
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
BENZYL ALCOHOL	X		X		

ALUMINUM SILICATE (TOTAL DUST)	X	X	X		X
TITANIUM DIOXIDE (TOTAL DUST)	X	X	X		X
DIETHYLENE TRIAMINE	X	X	X		X
XYLENE	X	X	X	X	X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
ALUMINUM OXIDES	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

D2A Very toxic materials

E Corrosive material



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