



Safety Data Sheet

Issue Date 29-Aug-2018

Revision Date 06-Dec-2017

Revision Number 17

1. IDENTIFICATION

Product identifier

Product Code F022-WH11A
Product Name EPOXOLINE OFF WHITE

Other means of identification

Common Name SERIES 22, PART A
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 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable Liquids	Category 4

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed
Causes severe skin burns and eye damage
May cause cancer
May cause respiratory irritation. May cause drowsiness or dizziness
Causes damage to organs through prolonged or repeated exposure
Combustible liquid

**Appearance** opaque**Physical state** liquid**Odor** Slight 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
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Response

Immediately call a POISON CENTER or doctor/physician
 specific treatment
 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 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
 Immediately call a POISON CENTER or doctor/physician
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 Do NOT induce vomiting

Storage

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

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

Very toxic to aquatic life with long lasting effects
 Acute Toxicity 22.36054754 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
1,3-BENZENEDIMETHANAMINE, REACTION PRODUCTS WITH STYRENE	404362-22-7	10 - <30%
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - <30%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	10 - <30%
COAL FIRED FLY ASH BI-PRODUCT	68131-74-8	1 - <10%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	1 - <10%
BENZYL ALCOHOL	100-51-6	1 - <10%

MICA (RESPIRABLE DUST)	12001-26-2	1 - <10%
AMORPHOUS SILICA	7631-86-9	1 - <10%
ISOPROPANOL	67-63-0	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

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

Most important symptoms and effects, both acute and delayed

Most important symptoms and effects	Asthma-like and/ or skin allergy-like symptoms. Burning. rash. Hives. Itching. Breathing difficulties.
Notes to physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water.

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. Nitrogen oxides (NOx). Aldehydes. Ammonia. Nitric acid, nitrosamine. Phenolics. Ketones.

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, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes. Use personal protective equipment. Ensure adequate ventilation.
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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 Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition. Do not breathe vapours or spray mist. Do not ingest. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products Strong oxidizing agents. Acids. Hypochlorites. Nitrous acid and other nitrosating agents. Water, alcohols, amines, strong bases, metal components, surface active materials. Peroxides. Cleaning solutions such as Chromerge and Aqua Regia. Reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 15 mg/m ³	5000 mg/m ³
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³ TWA: 50 µg/m ³	50 mg/m ³
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8	TWA: 1 mg/m ³	-	100 mg/m ³ 10 mg/m ³
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³ TWA: 50 µg/m ³	50 mg/m ³
MICA (RESPIRABLE DUST) 12001-26-2	TWA: 3 mg/m ³	TWA: 3 mg/m ³	1500 mg/m ³
AMORPHOUS SILICA 7631-86-9	-	TWA: 6 mg/m ³	3000 mg/m ³
ISOPROPANOL 67-63-0	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³	2000 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

Physical state	liquid	Odor	Slight aromatic
Appearance	opaque	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH		
Melting point / freezing point	No data available	
Boiling point / boiling range		
Flash point	93 °C / 200.0 °F	Pensky Martens - Closed Cup
Evaporation rate		
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit	N/A	
Lower flammability limit	N/A	
Vapor pressure		
Vapor density		
Specific gravity	1.57263	g/cm ³
Water solubility	Insoluble in cold water	
Solubility in other solvents		
Partition coefficient: n-octanol/water		
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity		
Dynamic viscosity	8600 centipoises	approx

Other Information

Density	13.11577 lbs/gal
Volatile organic compounds (VOC) content	0.16657 lbs/gal
Total volatiles weight percent	1.27 %
Total volatiles volume percent	2.29 %
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. Epoxy constituents.

Incompatible materials

Strong oxidizing agents, Acids, Hypochlorites, Nitrous acid and other nitrosating agents, Water, alcohols, amines, strong bases, metal components, surface active materials, Peroxides, Cleaning solutions such as Chromerge and Aqua Regia, Reducing 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. Nitrogen oxides (NOx). Carbon oxides. Hydrocarbons. Aldehydes. Ammonia. Ketones. Nitric acid, nitrosamine. Phenolics.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
Eye contact	Causes serious eye damage.
Skin contact	Contact causes severe skin irritation and possible burns.
Ingestion	Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	> 10000 mg/kg (Rat)	-	-
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8	> 2000 mg/kg (Rat)	-	-
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
AMORPHOUS SILICA 7631-86-9	= 7900 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
ISOPROPANOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Eye Damage. Skin burns.

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

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

Sensitization No information available.

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)		Group 2B	-	X

13463-67-7				
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8		Group 1	Known	
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X
AMORPHOUS SILICA 7631-86-9		Group 1 Group 3	Known	
ISOPROPANOL 67-63-0		Group 1 Group 3	-	

Reproductive effects

No information available.

STOT - single exposure

Causes damage to organs

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure

Target organ effects

Eyes, kidney, liver, Lungs, Nasal Cavities, respiratory system, Skin.

Aspiration hazard

Based on product level data, this product does not meet the requirement to be classified as an aspiration hazard. However, this product contains an ingredient that may cause aspiration if swallowed.

Acute Toxicity

22.36054754 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life

42.57209 % 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
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8			140 - 2000: 24 h Daphnia magna mg/L EC50
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
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
ISOPROPANOL 67-63-0	1000: 96 h Desmodosmus subspicatus mg/L EC50 1000: 72 h Desmodosmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static	13299: 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
BENZYL ALCOHOL 100-51-6	1.1
ISOPROPANOL 67-63-0	0.05

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.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
BENZENE 71-43-2	U019	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143, K144, K145, K147, K151, K159, K169, K171, K172	0.5 mg/L regulatory level	U019
CUMENE (SKIN) 98-82-8				U055

California Hazardous Waste Status

Chemical name	CAWAST
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8	Toxic Corrosive
ISOPROPANOL 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name PAINT & RELATED MATERIAL NOT REGULATED

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

15. REGULATORY INFORMATION

International Inventories

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

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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
 COAL FIRED FLY ASH BI-PRODUCT

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:

Chemical name	SARA 313 - Threshold Values
COAL FIRED FLY ASH BI-PRODUCT - 68131-74-8	0.1
ISOPROPANOL - 67-63-0	1.0

SARA 311/312 Hazardous

Categorization

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

Clean Water Act

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8		X		

CERCLA

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.

Chemical name	California Prop. 65
TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7	Carcinogen
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
COAL FIRED FLY ASH BI-PRODUCT - 68131-74-8	Carcinogen
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
AMORPHOUS SILICA - 7631-86-9	Carcinogen
ISOPROPANOL - 67-63-0	*
PETROLEUM SOLVENT (NAPHTHA) - 64742-95-6	Developmental
BENZENE - 71-43-2	Carcinogen Developmental
CUMENE (SKIN) - 98-82-8	Male Reproductive Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Chemical name	New Jersey	Massachusetts	Pennsylvania
TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7	X	X	X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	X
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8	X		X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	X
BENZYL ALCOHOL		X	X

100-51-6			
MICA (RESPIRABLE DUST) 12001-26-2	X	X	X
AMORPHOUS SILICA 7631-86-9		X	X
ISOPROPANOL 67-63-0	X	X	X

16. OTHER INFORMATION

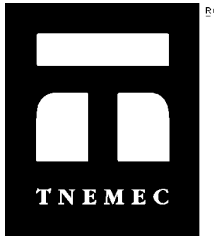
NFPA Health 3 Flammability 1 Instability 1 Physical hazard *
HMIS (Hazardous Health 3* Flammability 1 Reactivity 1
Material Information
System)

Prepared By Tnemec Regulatory Dept: 816-474-3400
Revision Date 06-Dec-2017
Revision Summary
 9 1 5 6 7 10 8 11 14 13 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 29-Aug-2018

Revision Date 06-Dec-2017

Revision Number 15

1. IDENTIFICATION

Product identifier

Product Code F022-0000B
Product Name EPOXOLINE CLEAR

Other means of identification

Common Name SERIES 22 / 322, PART B
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)

Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Flammable Liquids	Category 4

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes serious eye irritation
May cause an allergic skin reaction
May cause cancer
Causes damage to organs through prolonged or repeated exposure
Combustible liquid



Appearance opaque

Physical state liquid

Odor Slight

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
- Do not eat, drink or smoke when using this product

Response

- IF exposed or concerned: Get medical advice/attention specific treatment
- 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 ON SKIN: Wash with plenty of soap and water
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse

Storage

Store locked up

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

- Causes mild skin irritation
- Toxic to aquatic life with long lasting effects
- Acute Toxicity 66.86936 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	30 - <60%
EPOXY RESIN (LER)	25085-99-8	10 - <30%
EPOXY RESIN	28064-14-4	10 - <30%
DIGLYCIDYL ETHER OF CYCLOHEXANEDIMETHANOL	14228-73-0	1 - <10%
BENZYL ALCOHOL	100-51-6	1 - <10%
GAMMA-GLYCIDOPROPYLTRIMETHOXYSILANE	2530-83-8	1 - <10%
EPOXY RESIN (LER)	25068-38-6	1 - <10%

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Inhalation	Remove to fresh air. Oxygen or artificial respiration if needed.
Ingestion	If swallowed, do not induce vomiting. Get medical attention immediately.
Self-protection of the first aider	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.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Water.

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. Nitrogen oxides (NOx). Hydrogen cyanide. Silicon.

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, protective equipment and emergency procedures

Personal precautions	Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.
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Environmental Precautions

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

Water. Amines. Strong oxidizing agents. Acids. Bases. Hypochlorites. Peroxides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³ TWA: 50 µg/m ³	50 mg/m ³

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

Physical state	liquid	Odor	Slight
Appearance	opaque	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH		
Melting point / freezing point	No data available	
Boiling point / boiling range	72 °C / 162 °F	
Flash point	93 °C / 200.0 °F	Pensky Martens - Closed Cup
Evaporation rate		
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit	N/A	
Lower flammability limit	N/A	
Vapor pressure		
Vapor density		
Specific gravity	1.48056	g/cm3
Water solubility	Insoluble in cold water	
Solubility in other solvents		
Partition coefficient: n-octanol/water		
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity		
Dynamic viscosity	6600 centipoises	approx

Other Information

Density	12.34783 lbs/gal
Volatile organic compounds (VOC) content	0.02717 lbs/gal
Total volatiles weight percent	0.22 %
Total volatiles volume percent	0.33 %
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. Amines. Contact with water liberates toxic gas.

Incompatible materials

Water, Amines, Strong oxidizing agents, Acids, Bases, Hypochlorites, Peroxides

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. Nitrogen oxides (NOx). Hydrocarbons. Aldehydes. Hydrogen cyanide. Silicon.

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

Inhalation	May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
Eye contact	May cause irritation.

Skin contact Irritating to skin. May cause sensitization of susceptible persons.

Ingestion Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
GAMMA-GLYCIDOXYPROPYLTRI METHOXSILANE 2530-83-8	= 22600 µL/kg (Rat) = 7.01 g/kg (Rat)	= 3970 µL/kg (Rabbit)	> 5.3 mg/L (Rat) 4 h
EPOXY RESIN (LER) 25068-38-6	= 11400 mg/kg (Rat)	-	-

Information on toxicological effects

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

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

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. 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
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X

Reproductive effects No information available.

STOT - single exposure No information available

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Eyes, respiratory system.

Aspiration hazard Based on product level data, this product does not meet the requirement to be classified as an aspiration hazard. However, this product contains an ingredient that may cause aspiration if swallowed.

Acute Toxicity 66.86936 % of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

39.32811107 % 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
EPOXY RESIN (LER) 25085-99-8	11 mg/L 72 hr	2 mg/L 96 hr <i>Oncorhynchus mykiss</i>	1.8 mg/L 48h
BENZYL ALCOHOL 100-51-6	35: 3 h <i>Anabaena variabilis</i> mg/L EC50	460: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	23: 48 h water flea 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
BENZYL ALCOHOL 100-51-6	1.1

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.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ALCOHOL		Included in waste stream: F039		U154
BENZENE 71-43-2	U019	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143, K144, K145, K147, K151, K159, K169, K171, K172	0.5 mg/L regulatory level	U019
CUMENE (SKIN) 98-82-8				U055

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name PAINT & RELATED MATERIAL

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

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Does Not Comply
EINECS/ELINCS	Does Not Comply
ENCS	Does Not Comply
IECSC	Complies
KECL	Does Not Comply
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):

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

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

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.

Chemical name	California Prop. 65
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
PETROLEUM SOLVENT (NAPHTHA) - 64742-95-6	Developmental
METHYL ALCOHOL -	Developmental
BENZENE - 71-43-2	Carcinogen Developmental Male Reproductive
CUMENE (SKIN) - 98-82-8	Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Chemical name	New Jersey	Massachusetts	Pennsylvania
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	X
BENZYL ALCOHOL 100-51-6		X	X

16. OTHER INFORMATION

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

Prepared By Tnemec Regulatory Dept: 816-474-3400
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 9 1 4 5 7 10 8 11 14 15 13

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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guarantee that these are the only hazards which exist.

End of SDS