TNEMEC

Safety Data Sheet

Issue Date 14-Jul-2017 Revision Date 14-Jul-2017 Revision Number 14

1. IDENTIFICATION

Product identifier

Product Code F022-0000B
Product Name F022-0000B
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 Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203,

64120-1372 816-474-3400 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
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

Hazard statements Harmful if swallowed Harmful if inhaled Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction



Appearance opaque Physical state liquid Odor Slight

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Contaminated work clothing should not be allowed out of the workplace

Response

Get medical advice/attention if you feel unwell

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

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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

Storage

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

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

Other information

Toxic to aquatic life with long lasting effects

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

Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs

Acute Toxicity 6.001835 % 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-GLYCIDOXYPROPYLTRIMETHOXYSILA NE	2530-83-8	1 - <10%

EPOXY RESIN (LER)	25068-38-6	1 - <10%
THIXATROPIC ADDITIVE	C389	0.1 - <1%
STODDARD SOLVENT (MINERAL SPIRITS)	8052-41-3	0 - <0.1%
FATTY ACIDS	147900-93-4	0 - <0.1%
METHYL ALCOHOL	-	0 - <0.1%
FATTY ACIDS	85711-55-3	0 - <0.1%
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	0 - <0.1%

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

4. FIRST AID MEASURES

Description of first aid measures

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.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media 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.

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

Remove all sources of ignition. Spills may be collected with inert, absorbent material for Methods for containment

> 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.

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated Methods for cleaning up

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/m³ TWA: 50 µg/m³	50 mg/m ³
STODDARD SOLVENT (MINERAL SPIRITS) 8052-41-3	TWA: 100 ppm	TWA: 100 ppm TWA: 525 mg/m³ TWA: 500 ppm TWA: 2900 mg/m³	20000 mg/m³
METHYL ALCOHOL	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³ Skin	6000 ppm
ETHYLENE GLYCOL MONOBUTYL ETHER 111-76-2	TWA: 20 ppm	TWA: 25 ppm TWA: 120 mg/m³ Skin TWA: 50 ppm TWA: 240 mg/m³	700 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.

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, Skin and body protection

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 **Appearance** opaque

Odor Sliaht

Color No information available Odor threshold No information available

Values Remarks Property

No data available

Melting point / freezing point No data available No data available Boiling point / boiling range 72 °C / 162 °F

Flash point 93 °C / 200.0 °F Pensky Martens - Closed Cup

Evaporation rate No data available

Flammability (solid, gas) No data available No information available Flammability Limit in Air No data available

Upper flammability limit N/A

Lower flammability limit N/A

No data available Vapor pressure Vapor density No data available

Specific gravity 1.48385 q/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available No data available Partition coefficient: n-octanol/water No data available No data available Autoignition temperature

No data available **Decomposition temperature**

Kinematic viscosity No data available **Dynamic viscosity** 6600 centipoises approx

Other Information

Density 12.34783 lbs/gal Volatile organic compounds (VOC) .027 lbs/gal

content

Total volatiles weight percent .2180 % .3267 % Total volatiles volume percent

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 Causes serious eye irritation.

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

Ingestion Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)	= 500 mg/kg (Rat)	-	-
14808-60-7			
BENZYL ALCOHOL	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
100-51-6			
GAMMA-GLYCIDOXYPROPYLTRI	= 22600 μL/kg (Rat) = 7.01 g/kg (= 3970 μL/kg (Rabbit)	> 5.3 mg/L (Rat) 4 h
METHOXYSILANE	Rat)		
2530-83-8			
EPOXY RESIN (LER)	= 11400 mg/kg (Rat)	-	-
25068-38-6			
METHYL ALCOHOL	= 6200 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h = 64000
			ppm (Rat)4 h
ETHYLENE GLYCOL	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
MONOBUTYL ETHER			
111-76-2			

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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. Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on

duration and level of 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.

Garoniogomony	baromogeriory has noted any ingredient as a caromoger			
Chemical name	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	Х
14808-60-7				

ETHYLENE GLYCOL АЗ Group 3 MONOBUTYL ETHER 111-76-2

Reproductive effects No information available. STOT - single exposure No information available STOT - repeated exposure No information available **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.

6.001835 % of the mixture consists of ingredient(s) of unknown toxicity. mg/kg mg/l **Acute Toxicity**

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

45.16046 % 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
EPOXY RESIN (LER) 25085-99-8	11 mg/L 72 hr	2 mg/L 96 hr Oncorhynchus mykiss	1.8 mg/L 48h
BENZYL ALCOHOL 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	10: 96 h Lepomis macrochirus mg/L LC50 static 460: 96 h Pimephales promelas mg/L LC50 static	23: 48 h water flea mg/L EC50
METHYL ALCOHOL		18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 28200: 96 h Pimephales promelas mg/L LC50 flow-through 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	
ETHYLENE GLYCOL MONOBUTYL ETHER 111-76-2		2950: 96 h Lepomis macrochirus mg/L LC50 1490: 96 h Lepomis macrochirus mg/L LC50 static	1000: 48 h Daphnia magna mg/L EC50 1698 - 1940: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Chemical name	log Pow
EPOXY RESIN (LER)	3
25085-99-8	
BENZYL ALCOHOL	1.1
100-51-6	
METHYL ALCOHOL	-0.77
ETHYLENE GLYCOL MONOBUTYL ETHER	0.81
111-76-2	

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.

accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ALCOHOL		Included in waste stream:		U154
		F039		

Chemical name	CAWAST
METHYL ALCOHOL	Toxic
	Ignitable

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name PAINT & RELATED MATERIAL

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

EINECS/ELINCS
Does Not Comply
ENCS
Does Not Comply
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):

Chemical name HAPS Data

METHYL ALCOHOL

ETHYLENE GLYCOL MONOBUTYL ETHER

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
METHYL ALCOHOL -	1.0
ETHYLENE GLYCOL MONOBUTYL ETHER - 111-76-2	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

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ALCOHOL	5000 lb		RQ 5000 lb final RQ
			RQ 2270 kg final RQ

California Prop. 65

: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	
METHYL ALCOHOL -	Developmental	
ETHYLENE GLYCOL MONOBUTYL ETHER - 111-76-2	*	

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Chemical name	New Jersey	Massachusetts	Pennsylvania
CRYSTALLINE SILICA (QUARTZ)	X	X	X
14808-60-7			
BENZYL ALCOHOL		X	X
100-51-6			
STODDARD SOLVENT (MINERAL	X	X	X
SPIRITS)			
8052-41-3			
METHYL ALCOHOL	X	X	X
ETHYLENE GLYCOL	X	X	X
MONOBUTYL ETHER			
111-76-2			

16. OTHER INFORMATION

Health 2 Flammability 1 Instability 1 Physical hazard -**NFPA**

Health 2 Flammability 1 HMIS (Hazardous Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 14-Jul-2017

Revision Summary 9 1 4 5 7 10 8 11 14

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