



Material Safety Data Sheet

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1. PRODUCT AND COMPANY IDENTIFICATION

Product code F051-1204
Trade name VINA-CRYL PVA SEALER
Manufacturer TNE MEC Company, Inc.
123 West 23rd Avenue
North Kansas City, MO 64116-3064
816-474-3400
Emergency telephone 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

WARNING!

HARMFUL BY INHALATION.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.
OVEREXPOSURE MAY CAUSE KIDNEY DAMAGE.

Potential health effects

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

Acute effects

Eyes

Irritating to eyes.

Skin

Irritating to skin. Risk of damages after often repeated exposure.

Inhalation

Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Nasal and respiratory irritation, anesthetic effects, dizziness, weakness, fatigue, nausea, and headache. .

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea..

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.

Interactive effects Use of alcoholic beverages may enhance toxic effects.

Potential environmental effects See Section 12 for additional Ecological Information

Target Organ Effects Lungs, Respiratory system, Central nervous system, Eyes, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	5 - 10
ETHYLENE GLYCOL	107-21-1	1.68
ALUMINUM OXIDES	1344-28-1	0.1 - 1
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	0.364
ZIRCONIUM OXIDE	1314-23-4	0.1 - 1

4. FIRST AID MEASURES

Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice
Skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes
Ingestion	Do NOT induce vomiting. Call a physician or Poison Control Centre immediately
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flammable properties	No information available.
Suitable extinguishing media	Carbon dioxide (CO ₂) - Foam - Dry powder
Hazardous decomposition products	Oxides of carbon, hydrocarbons. Ammonia.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically and collect in suitable container for disposal.
Other information	Not applicable

7. HANDLING AND STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practice.

Storage

Keep containers tightly closed in a cool, well-ventilated place

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
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
ETHYLENE GLYCOL	Ceiling: 100 mg/m ³	Ceiling: 125 mg/m ³ Ceiling: 50 ppm	Ceiling: 50 ppm Ceiling: 127 mg/m ³	CEV: 100 mg/m ³	Peak: 100 mg/m ³
ALUMINUM OXIDES	TWA: 1 mg/m ³	TWA: 5 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
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
ZIRCONIUM OXIDE	TWA: 5 mg/m ³		TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin protection

Wear protective gloves/clothing.

Eye/face protection

Tightly fitting safety 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	93°C / 200.0°F
Boiling range	100 - 205°C / 212.0 - 401.0°F
Upper explosion limit	No information available
Lower explosion limit	No information available
Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.28365 g/cm ³
Density	10.68193 lbs
Volatile organic compounds (VOC) content	.904 lbs
Volatile by weight	56.1260 %
Volatile by volume	71.8059 %

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to avoid	Extremes of temperature and direct sunlight. Heat, flames and sparks.
Incompatible products	Strong oxidizing agents. Acids.	Possibility of hazardous reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

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Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
ETHYLENE GLYCOL	4000 mg/kg (Rat)	9530 µL/kg (Rabbit)	
ALUMINUM OXIDES	5000 mg/kg (Rat)		
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		

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	

Mutagenicity	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
Target Organ Effects	Lungs, Respiratory system, Central nervous system, Eyes, Skin.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
ETHYLENE GLYCOL	EC50 6500 - 13000 mg/L 96 h	LC50 14-18 ml/L Oncorhynchus mykiss 96 h LC50 40000-60000 mg/L Pimephales promelas 96 h LC50= 16000 mg/L Poecilia reticulata 96 h LC50= 27540 mg/L Lepomis macrochirus 96 h LC50= 40761 mg/L Oncorhynchus mykiss 96 h LC50= 41000 mg/L Oncorhynchus mykiss 96 h	EC50 = 620.0 mg/L 30 min EC50 = 620 mg/L 30 min EC50 = 10000 mg/L 16 h	EC50 = 46300 mg/L 48 h

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	In accordance with local and national 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, WATER-BASE, FREEZABLE (NOT REGULATED)

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDL 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

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component
 ETHYLENE GLYCOL

United States of America Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
ETHYLENE GLYCOL	107-21-1	1.68	1.0
ALUMINUM OXIDES	1344-28-1	0.1 - 1	1.0

SARA 311/312 Hazardous Categorization

Chronic Health Hazard no
Acute Health Hazard no
Fire Hazard no
Sudden Release of Pressure Hazard no
Reactive Hazard no

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
ETHYLENE GLYCOL	5000 lb	

United States of America State Regulations

California Prop. 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
TITANIUM DIOXIDE (TOTAL DUST)	X	X	X		X
ETHYLENE GLYCOL	X	X	X	X	X
ALUMINUM OXIDES	X	X	X		X
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
ZIRCONIUM OXIDE	X				X

Other international regulations

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

WHMIS Classification

Non-controlled

Component	NPRI
ETHYLENE GLYCOL	Part 1, Group 1 Substance
ALUMINUM OXIDES	Part 1, Group 1 Substance (fibrous form)

16. OTHER INFORMATION

Revision Date 16-Sep-2010

Revision Note No information available

HMIS (Hazardous Material Information System) Health 2 Flammability 1 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