



PRODUCT SAFETY INFORMATION SHEET

This is a condensed document providing safety and health information pertinent to the product. For a complete regulatory MSDS please contact your Tnemec Representative at www.tnemec.com or 1-800-TNEMEC1.

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2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

COMBUSTIBLE LIQUID AND VAPOR.
HARMFUL IF INHALED.
HARMFUL OR FATAL IF SWALLOWED.
CAUSES SKIN AND EYE BURNS.
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

Potential Health Effects

Principle Routes of Exposure

Eye contact, Inhalation, Skin contact.

Acute Effects

Eyes

Causes burns.

Skin

Causes burns. May cause sensitization by skin contact.

Inhalation

Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.

Ingestion

May be harmful if swallowed.

Chronic Effects

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure.)

Target Organ Effects

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
TALC (RESPIRABLE DUST)	14807-96-6	20.36946
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	19.05055
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	98-56-6	17.93839
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	13.09598
MODIFIED CYCLOALIPHATIC POLYAMINE	-	0 - 10%
BENZYL ALCOHOL	100-51-6	5.145453
N-BUTANOL (SKIN)	71-36-3	3.824727
ISOPHORONE DIAMINE	2855-13-2	2.401211
AMORPHOUS SILICA	7631-86-9	2.35192
ALUMINUM OXIDES	1344-28-1	2.116728
1,2,4-TRIMETHYLBENZENE	95-63-6	0.6245534
XYLENE	1330-20-7	0.319463
1,3,5-TRIMETHYLBENZENE	108-67-8	0.1561383

4. FIRST AID MEASURES

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

5. FIRE-FIGHTING MEASURES

Flammable Properties Combustible material.

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO₂) - Foam - Dry chemical

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

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

Protective Equipment and Precautions for Firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Methods for Cleaning Up	If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Storage

Keep away from heat, sparks and flame. Use only in an area containing flame proof equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
TALC (RESPIRABLE DUST)	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 3 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³
TITANIUM DIOXIDE (TOTAL DUST)	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	TWA: 2.5 mg/m ³		TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	
CRYSTALLINE SILICA (QUARTZ)	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
N-BUTANOL (SKIN)	TWA: 20 ppm	Skin Ceiling: 50 ppm Ceiling: 150 mg/m ³ TWA: 100 ppm TWA: 300 mg/m ³	Ceiling: 152 mg/m ³ Ceiling: 50 ppm Skin	TWA: 20 ppm	Peak: 150 mg/m ³ Peak: 50 ppm
ALUMINUM OXIDES	TWA: 1 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
1,2,4-TRIMETHYLBENZENE	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 125 mg/m ³ TWA: 25 ppm STEL: 170 mg/m ³ STEL: 35 ppm

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

XYLENE	TWA: 100 ppm STEL: 150 ppm	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m ³	TWA: 434 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 650 mg/m ³	TWA: 435 mg/m ³ TWA: 100 ppm STEL: 150 ppm STEL: 655 mg/m ³
1,3,5-TRIMETHYLBENZENE	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 125 mg/m ³ TWA: 25 ppm STEL: 170 mg/m ³ STEL: 35 ppm

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin Protection

Lightweight protective clothing, Apron, Impervious gloves

Eye/face Protection

If splashes are likely to occur, wear Goggles.

Respiratory Protection

Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	41°C / 105.0°F	Method	Pensky Martens - Closed Cup
Boiling Point/Range	116 - 118°C / 241.0 - 245.0°F	Upper Exposure Limits	No information available
Lower Exposure Limits	No information available	Evaporation Rate	No information available
Vapour Pressure	No information available	Vapour Density	No information available
Specific Gravity	1.76259	Density	14.66742
VOC Content (lbs/gal)	1.227	% Volatile by Weight	24.3350
% Volatile by Volume	36.8250		

10. STABILITY AND REACTIVITY

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

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

16. OTHER INFORMATION

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
N-BUTANOL (SKIN)	71-36-3	3.824727	1.0
1,2,4-TRIMETHYLBENZENE	95-63-6	0.6245534	1.0
XYLENE	1330-20-7	0.319463	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Component
XYLENE

HMIS

Health 2

Flammability 2

Reactivity 1

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.