



a Supplier of Silicones from China

MATERIAL SAFETY DATA SHEET

Peace Modern Town C-2408, Dalian, 116023, China
Tel: +86-411-84377919 Fax: +86-411-84511565
Web: www.sibond.com E-mail: info@sibond.com

NAME USED ON LABEL: 3-MERCAPTOPROPYLTRIMETHOXYSILANE
CHEMICAL NAME: 3-MERCAPTOPROPYLTRIMETHOXYSILANE
SYNONYMS: 3-TRIMETHOXYSILYL)PROPYLMERCAPTAN
CHEMICAL FAMILY: ORGANOSILANE
FORMULA: C₆H₁₆O₃SSi
HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 1

INGREDIENTS

IDENTITY

3-MERCAPTOPROPYLTRIMETHOXYSILANE

CAS NO.	%	TLV
4420-74-0	>99	not determined

METHANOL 67-56-1 <1 200ppm – skin

PHYSICAL DATA

Boiling Point: 93°C at 40mm

Freezing Point: <0°C

Specific Gravity: 1.05

Vapor Pressure, 25°: <5mm

Vapor Density (air=1): >1

Solubility in water: insoluble, reacts

% volatiles: <5

Evaporation rate: NA

Molecular Weight: 196.34

Other: NA

Appearance & Color: Clear to straw liquid with unpleasant odor of sulfide.

FIRE & EXPLOSION DATA

Flash Point, COC: 96°C (205°F) Autoignition Temp.: not determined

Flammability Limits: not determined

Extinguishing Media: Water spray, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

ENVIRONMENTAL INFORMATION

Spill response: May be hazardous to aquatic life if released to open waters. Cover spill with absorbent material. Transfer to a suitable container for disposal.

Recommended Disposal: May be incinerated. Alternately, absorb onto clay or vermiculite and dispose of absorbent material as solid waste. Follow all chemical pollution control regulations. Small spills can be mixed with 6% aqueous sodium hypochlorite (laundry bleach) to reduce odor.

- 1-

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemical Abstract Service Registration Number
Sibond © 2010

HEALTH HAZARD DATA

On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system.

Eye Contact: Will cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis which may be delayed several hours. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of vapors or particulates of may irritate the respiratory tract.

Overexposure may produce coughing, headache and nausea.

Oral Toxicity-rat, LD50: 2380mg/kg

Primary Irritation index (skin): 0.19

Chronic Toxicity: There are no known chronic effects related to this compound.

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention, preferably from an ophthalmologist.

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

REACTIVITY DATA

Stability: Stable in sealed containers.

Conditions to avoid: Combustible; avoid contact with heat, sparks or open flame.

Incompatibility (materials to avoid): Reacts with water and moisture in air liberating methanol.

Hazardous decomposition products: Organic Acid Vapors.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or combination organic vapor acid gas respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

- 2 -

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemical Abstract Service Registration Number
Sibond © 2010

Manage all transfers with minimum fugitive emissions to manage odor issues.

TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI
DOT HAZARD CLASS: NOT REGULATED
DOT LABEL: NOT REQUIRED
DOT ID No: NOT REQUIRED

The information contained in this document has been gathered from reference materials and/or Sibond test data and is to the best knowledge and belief of Sibond accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Sibond makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore.

- 3-

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemical Abstract Service Registration Number
Sibond © 2010