

# MATERIAL SAFETY DATA SHEET

NAME USED ON LABEL: CHLOROMETHYLTRIETHOXYSILANE

CHEMICAL NAME: CHLOROMETHYLTRIETHOXYSILANE SYNONYMS: TRIETHOXY(CHLOROMETHYL)SILANE

CHEMICAL FAMILY: ORGANOSILANE ESTER

FORMULA: C7H17ClO3Si

HMIS CODES HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 1

#### **INGREDIENTS**

IDENTITY CAS NO. % TLV OSHA PEL CHLOROMETHYLTRIETHOXYSILANE 15267-95-5 >95 not established ETHANOL 64-17-5 <5 1000ppm

#### PHYSICAL DATA

Boiling Point: 90-1°C at 25mm Melting Point: <0°C

Specific Gravity: 1.05 Vapor Pressure, 25°: <2mm

Vapor Density (air = 1): > 1 Solubility in water: insoluble, reacts slowly % volatiles: NA Evaporation rate (butyl Acetate = 1): <1

Molecular Weight: 212.75 Other: N/A Appearance & Color: Clear liquid, characteristic odor

# **FIRE & EXPLOSION DATA**

Flash Point, TCC: 47°C (117°F) Autoignition Temp.: not determined

Flammability Limits; not determined

Extinguishing Media: Water spray or fog, 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: Sweep material and transfer to a suitable container for disposal. Recommended Disposal: Incinerate. Follow all chemical pollution control regulations.

## **HEALTH HAZARD DATA**

Eye Contact: May cause immediate or delayed severe eye irritation. Skin contact: May produce irritation or contact dermatitis. Material generates ethanol on contact with water or moisture in skin, eyes and mucous membranes and has an irritating, dehydrating effect on overexposed tissue. Prompt and

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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

thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation may irritate the respiratory tract. Overexposure can cause lung damage - pulmonary toxin.

Note: The hydrolysis product of this compound is ethanol. Overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, drowsiness). Ethanol is metabolized to acetaldehyde and acetic acid which in large quantities result in metabolic acidosis, CNS depression and death due to respiratory arrest.

Oral Toxicity - rat, LD50: 2400mg/kg Inhalation Toxicity: not determined

## SUGGESTED FIRST AID

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

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

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. To conscious individual give one full cup of water to dilute ingested material. Get medical attention.

#### **REACTIVITY DATA**

Stability: Stable

Conditions to avoid: Material decomposes slowly in contact with moist air or with water liberating ethanol; TLV(TWA) = 1000ppm. Avoid contact with oxidizing agents..

Hazardous decomposition products: Ethanol, organic acid vapors and silicon dioxide.

# **SPECIAL PROTECTION INFORMATION**

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved organic vapor 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.

Containers require grounding during use.

## **TRANSPORTATION**

DOT SHIPPING NAME: FLAMMABLE LIQUID, N.O.S.

(CHLOROMETHYLTRIETHOXYSILANE)

**DOT HAZARD CLASS: 3** 

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DOT LABEL: FLAMMABLE LIQUID DOT ID No: UN1993 PG III

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