

**MATERIAL SAFETY  
DATA SHEET**

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NAME USED ON LABEL: 3-CHLOROPROPYLTRIMETHOXYSILANE  
CHEMICAL NAME: 3-CHLOROPROPYLTRIMETHOXYSILANE  
SYNONYMS: 1-CHLORO-3-(TRIMETHOXYSILYL)PROPANE  
CHEMICAL FAMILY: ORGANOSILANE  
FORMULA: C<sub>6</sub>H<sub>15</sub>ClO<sub>3</sub>Si  
HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 1

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV
3-CHLOROPROPYLTRIMETHOXYSILANE (TLV for methanol: 200ppm - skin)	2530-87-2	>95	not established

**PHYSICAL DATA**

Boiling Point: 195-6°C	Freezing Point: <0°C
Specific Gravity: 1.08	Vapor Pressure, 100°: 40mm
Vapor Density (air=1): 6.9	Solubility in water: reacts
% volatiles: NA	Evaporation rate: NA
Molecular Weight: 198.72	Other: NA
Appearance & Color: Clear to straw liquid with mild odor.	

**FIRE & EXPLOSION DATA**

Flash Point, COC: 84°C (183°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: Hydrolyze material by mixing with water in a hood.  
Organic layer may be incinerated. Alternately, absorb onto clay or vermiculite and dispose of absorbent material as solid waste. Follow all chemical pollution control regulations.

**HEALTH HAZARD DATA**

Eye Contact: Vapors may cause immediate or delayed severe eye irritation.

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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  
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Liquid can cause severe conjunctivitis and corneal damage

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: A recent study indicated that chloropropyltrimethoxysilane is a genetically active material via inhalation in a bone marrow micronucleus assay in female rats exposed to 200ppm daily over a 28 day period. However, using the same assay, no evidence of genetic activity was found in mice exposed to 500, 1000, or 1625 mg/kg by intraperitoneal injection. The relevance of this information to humans has not yet been determined. Inhalation of vapors or particulates will irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Oral 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. 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 stored under dry nitrogen.

**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. Avoid contact with peroxides, oxidizing agents, alcohols, acids, Lewis acids.

**Hazardous decomposition products:** Organic acid vapors, methanol.

### **SPECIAL PROTECTION INFORMATION**

**Ventilation:** Local exhaust is required. Mechanical is recommended.

**Respiratory Protection:** If exposure exceeds TLV air-supplied or combination organic vapor amine 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.

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## **OTHER PRECAUTIONS**

For research and industrial use only.

Storage and Handling: Store in sealed containers.

Containers require grounding during use.

## **TRANSPORTATION**

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

DOT HAZARD: Not regulated

DOT LABELS: Not Regulated

DOT ID No: Not Regulated

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