

GELEST, INC.

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MATERIAL SAFETY DATA SHEET EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: 3-ACRYLOXYPROPYLTRICHLOROSILANE - SIA0199.0

CHEMICAL NAME: 3-ACRYLOXYPROPYLTRICHLOROSILANE

SYNONYMS: 2-PROPENOIC ACID, 3-(TRICHLOROSILYL)PROPYL ESTER

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C₆H₉Cl₃O₂Si

HMIS CODES HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 1

INGREDIENTS

IDENTITY CAS NO. % TLV OSHA PEL

3-ACRYLOXYPROPYLTRICHLOROSILANE 38595-89-0 >95 not established

35ppm equivalent for HCl (HCl = 5ppm)

OTHER ORGANOSILANES not found <5 not established

PHYSICAL DATA

Boiling Point: 68°C @ 0.4mm Freezing Point: <0°C

Specific Gravity: 1.26 Vapor Pressure, 20°C: <0.1mm

Vapor Density (air=1): >1 Solubility in water: reacts
% volatiles: NA Evaporation rate: NA

Molecular Weight: 247.58 Other: NA

Appearance & Color: Clear to straw liquid with acrid odor of hydrogen chloride

FIRE & EXPLOSION DATA

Flash Point, COC: >100°C (>212°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.

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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.: Chemcial Abstract Service Registration Number Gelest, Inc. © 2008



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. Aqueous layer contains hydrochloric acid which should be neutralized. 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: 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 organochlorosilanes will irritate the respiratory tract. Overexposure may produce coughing, headache and nausea. Inhalation of large amounts is expected to cause necrosis of tracheal epithelium, bronchitis and interstitial pneumonia by analogy to animal tests for tetrachlorosilane.

Oral Toxicity: Not determined.

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.

SKIN: Flush with water, then wash with soap and water. *Note to physician:*

Organochlorosilanes react with water to form hydrochloric acid, consequently treatment for acid burns may be considered.

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.

REACTIVITY DATA

Stability: Stable in sealed containers stored in the dark at <5°C. Polymerization can occur when stored at elevated temperature.

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

Incompatibility (materials to avoid): Reacts with water and moisture in air liberating hydrogen chloride and forming a polyner. Avoid contact with peroxides, oxidizing agents, alcohols, amines.

Hazardous decomposition products: Organic acid vapors, hydrogen chloride.

Hazardous polymerization: May occur if stored at elevated temperature(>40°C).

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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 in the dark at <5°C

TRANSPORTATION

DOT SHIPPING NAME: CHLOROSILANES, N.O.S.

(ACRYLOXYPROPYLTRICHLOROSILANE)

DOT HAZARD CLASS: CORROSIVE

DOT LABEL: CORROSIVE

DOT ID No: UN 2987 PG II

Prepared by safety and environmental affairs ISSUE DATE SIA0199.0: 6/5/04 **SUPERSEDES: 12/16/02**

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