

**GELEST, INC.**

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **TRIMETHYLSILYL CROTONATE - SIT8584.5**

CHEMICAL NAME: TRIMETHYLSILYL CROTONATE

SYNONYMS: TRIMETHYLSILYL-2-BUTENOIC ACID

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C<sub>7</sub>H<sub>14</sub>O<sub>2</sub>Si

HMIS CODES HEALTH: 3 FLAMMABILITY: 3 REACTIVITY: 1

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV
TRIMETHYLSILYL CROTONATE	18269-64-2	>95	not established

(ACGIH TLV for the isomer methacrylic acid: TWA 20ppm)

**PHYSICAL DATA**

Boiling Point: 49-50°C at 10mm

Specific Gravity: 0.897

Vapor Density (air=1): >1

% volatiles: 100

Molecular Weight: 158.27

Appearance & Color: Clear to straw liquid with mild odor

Freezing Point: <0°C

Vapor Pressure, 25°C: <10mm

Solubility in water: reacts

Evaporation rate (butyl acetate = 1): <1

Other: NA

**FIRE & EXPLOSION DATA**

Flash Point, COC: 31°C (88°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.

-1-(SIT8584.5)

## 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.

## 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 may irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Oral Toxicity: Not determined.

The hydrolysis product, crotonic acid has a reported oral toxicity-rat, LD50: 1000mg/kg

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.

**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 less than 25°C.

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

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

Hazardous decomposition products: Organic acid vapors, crotonic acid.

Non-hazardous polymerization can occur.

-2-(SIT8584.5)

## 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 use only.

Storage and Handling: Store in sealed containers less than 25°C

## TRANSPORTATION

DOT SHIPPING NAME: FLAMMABLE LIQUID, N.O.S.  
(TRIMETHYLSILYL CROTONATE)

DOT HAZARD CLASS: 3

DOT LABEL: FLAMMABLE LIQUID

DOT ID No: 1993

PG: III

Prepared by safety and environmental affairs

ISSUE DATE SIT8584.5: 2/4/09

SUPERSEDES: none

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