

# GELEST, INC.

11 East Steel Rd. Morrisville, PA 19067  
Phone: (215) 547-1015

## MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **HEXYLTRIFLUOROSILANE - SIH6168.0**

CHEMICAL NAME: HEXYLTRIFLUOROSILANE

SYNONYMS: TRIFLUOROHEXYLSILANE

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C<sub>6</sub>H<sub>13</sub>F<sub>3</sub>Si

HMIS CODES HEALTH: 4 FLAMMABILITY: 4 REACTIVITY: 1

## INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
HEXYLTRIFLUOROSILANE	96164-66-8	>95	not established	(OSHA PEL: TWA 3ppm for HF)

## PHYSICAL DATA

Boiling Point: 88-91°C

Specific Gravity: 0.984

Vapor Density (air=1): >1

% volatiles: NA

Molecular Weight: 170.25

Appearance & Color: Clear to straw liquid with acrid odor

Freezing Point: <0°C

Vapor Pressure: not determined

Solubility in water: insoluble, reacts

Evaporation rate: NA

Other: NA

## FIRE & EXPLOSION DATA

Flash Point, COC: -7°C (21°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, hydrogen fluoride and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(SIH6168.0)

## 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: In an exhausted area, mix with sodium carbonate, calcium carbonate or soda ash and then slowly add water. Absorb onto clay or vermiculite and dispose of absorbent material as solid waste. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

On contact with water and human tissue this compound liberates hydrogen fluoride (hydrofluoric acid).

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

Skin contact: Will produce irritation, contact dermatitis or tissue necrosis 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: not determined

Chronic Toxicity: There are no known chronic effects related to this compound. Hydrofluoric acid, the hydrolysis product has demonstrated mutagenicity and teratogenicity in laboratory bioassay.

## 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 saturated solution of sodium carbonate or 3% aqueous ammonia.

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 and human tissues to form hydrofluoric acid. Massage a paste of 20% magnesium oxide in glycerol onto the burned areas. Inject 2-5 cc of 10% calcium gluconate beneath and around the burned areas. Gastric lavage, if swallowed, using 5% calcium chloride followed by saline catharsis.*

For ingestion, calcium gluconate intravenously and calcium lactate orally may be considered.

-2-(SIH6168.0)

## REACTIVITY DATA

Stability: Stable in sealed plastic 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 use only.

Storage and Handling: Store in sealed chemically resistant plastic containers.

## TRANSPORTATION

DOT SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE, N.O.S.  
(HEXYLTRIFLUOROSILANE)

DOT HAZARD CLASS: 8 Subsid: 3

DOT LABEL: CORROSIVE

DOT ID No: UN2920 PG: II

Prepared by safety and environmental affairs      ISSUE DATE SIH6168.0: 5/18/04  
SUPERSEDES: 7/23/03

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. 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. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore.

-3-(SIH6168.0)