GELEST, INC.

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

NAME: (HEPTADECAFLUORO-1,1,2,2-TETRAHYDRODECYL)TRICHLOROSILANE - SIH5841.0 CHEMICAL NAME: (HEPTADECAFLUORO-1,1,2,2-TETRAHYDRODECYL)TRICHLOROSILANE SYNONYMS: (1H.1H.2H.2H-PERFLUORODECYL)TRICHLOROSILANE CHEMICAL FAMILY: ORGANOSILANE FORMULA: C10H4Cl3F17Si HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 1 INGREDIENTS CAS NO. % TLV **IDENTITY** (HEPTADECAFLUORO-1,1,2,2-TETRAHYDRODECYL)TRICHLOROSILANE 78560-44-8 >95 not determined (OSHA PEL for hydrogen chloride, TWA: 5ppm) **PHYSICAL DATA**

Boiling Point: 216-8°CFreezing Point: <0°C</th>Specific Gravity: 1.70Vapor Pressure, 25°C: <2mm</td>Vapor Density (air=1): >1Solubility in water: reacts% volatiles: NAEvaporation rate: NAMolecular Weight: 581.56Other: NAAppearance & Color: Clear to straw-pink liquid with acrid odor of hydrogen chloride

FIRE & EXPLOSION DATA

Flash Point, COC : >110°C (>230°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 of hydrogen chloride and organic acid vapors may develop when material is exposed to water 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

Perfluorooctyl compounds have been shown to persist in the environment.

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: Will produce irritation or contact dermatitis which may be delayed several hours. Prolonged exposure will cause inflammation and chemical burns. 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- rat, LD50: >5000mg/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 under a dry inert atmosphere. 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. Avoid contact with alcohols, acids, oxidizers.

Hazardous decomposition products: Organic acid vapors, hydrogen chloride, hydrogen flluoride.

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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.

TRANSPORTATION

DOT SHIPPING NAME: Chlorosilanes, corrosive, n.o.s. (HEPTADECAFLUORO-1,1,2,2-TETRAHYDRODECYL)TRICHLOROSILANE)

PG: II

DOT HAZARD CLASS: 8 DOT LABEL: Corrosive Liquid DOT ID No: UN2987

Prepared by safety and environmental affairs

ISSUE DATE SIH5841.0: 4/9/10 SUPERSEDES: 8/30/06

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