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: **DICHLOROSILANE, 25% in xylene - SID3368.6**
CHEMICAL NAME: DICHLOROSILANE, 25% in xylene
SYNONYMS: SILICOMETHYLENE CHLORIDE
CHEMICAL FAMILY: CHLOROSILANE
FORMULA: H_2Cl_2Si
HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 2

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
XYLENE	1330-20-7	>70	TWA 100ppm	TWA 100ppm
DICHLOROSILANE	4109-96-0	>20	not established	not established
			(OSHA PEL for hydrogen chloride, TWA: 5ppm)	

PHYSICAL DATA

Boiling Point: 8.3°C - initial
Freezing Point: <0°C
Specific Gravity: 0.94
Vapor Pressure at 20°C: not determined
Vapor Density(Air = 1): >1
Solubility in water: reacts violently
% volatiles: >75%
Evaporation rate (Butyl Acetate = 1): 40
Molecular Weight: 101.01
Other: NA
Appearance & Color: Clear to straw liquid with acrid odor of hydrogen chloride

FIRE & EXPLOSION DATA

Flash Point, COC : -13°C (8°F) Autoignition Temp.: 55°C
Flammability Limits- LEL: not determined UEL: not determined

Explosions of partially hydrolyzed dichlorosilane dispersed on high surface area media have been reported.

Extinguishing Media: Alcohol resistant foam, carbon dioxide, dry chemical. Use of high expansion foam (100:1) is recommended to cover flames.
Special Fire Fighting Procedures: Use only dry media to extinguish flames. Water spray or fog should only be used to knock down hydrogen chloride vapors in areas downwind from the fire. Avoid eye and skin contact. Do not breathe fumes or inhale vapors. If material has been opened and exposed to water, flood, do not partially wet, non-burning material with water.
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.

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 slowly mixing with water in a hood under a nitrogen atmosphere. Aqueous liquid layer contains hydrochloric acid which should be neutralized. Non-aqueous liquid layer contains xylene which should be treated as flammable waste. Solids should be treated as flammable and mixed with clay or vermiculite and disposed of as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: Will cause immediate or delayed severe chemical burns, including conjunctivitis and corneal damage.

Skin contact: Will produce irritation or contact dermatitis. Can cause severe chemical burns. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of vapors will irritate the respiratory tract. Overexposure may produce severe tissue damage.

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: Wipe off excess chemical gently and without delay. After the bulk of material is removed by wiping, 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: Material forms a siloxane polymer on the skin, eyes or in the lungs.

REACTIVITY DATA

Stability: Stable in sealed containers stored under a dry inert atmosphere.
Conditions to avoid: 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. Platinum, platinum and iron salts and other Lewis acids can cause generation of flammable hydrogen gas in the presence of moisture. Forms impact sensitive explosive mixtures with potassium permanganate.
Hazardous decomposition products: Organic acid vapors, hydrogen chloride.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.
Respiratory Protection: If exposure exceeds TLV air-supplied or NIOSH certified combination organic vapor - acid gas respirator.
Eye and Face Protection: Chemical worker's goggles (Viton recommended). 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 under dry inert atmosphere. Containers can generate pressure during storage. Open carefully.

Vapors can ignite spontaneously if heated. (See Autoignition Temperature)

Containers required grounding during use.

TRANSPORTATION

DOT SHIPPING NAME: CHLOROSILANES, WATER-REACTIVE, FLAMMABLE, CORROSIVE, N.O.S. (DICHLOROSILANE)
DOT HAZARD CLASS: 4.3 SUBSIDIARY: 3,8
DOT LABEL: Dangerous When Wet and Flammable Liquid and Corrosive
DOT ID No: UN2988 PG: I

AIR TRANSPORT FORBIDDEN

Prepared by safety and environmental affairs MSDS ISSUE DATE SID3368.6: 12/3/12
SUPERSEDES: none

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