

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME ON LABEL: **2,2-DIMETHOXY-1,6-DIAZA-2-SILACYCLOOCTANE 10%
in cyclohexane - SID3543.1**

CHEMICAL NAME: 2,2-DIMETHOXY-1,6-DIAZA-2-SILACYCLOOCTANE, in cyclohexane

SYNONYMS: CYCLICAZASILANE SOLUTION

CHEMICAL FAMILY: ORGANOMETHOXYSILANE in hydrocarbon

FORMULA: C₇H₁₈N₂O₂Si

HMIS CODES HEALTH: 3 FLAMMABILITY: 3 REACTIVITY: 1

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
2,2-DIMETHOXY-1,6-DIAZA-2-SILACYCLOOCTANE	182008-07-7	8-12	not established	not established
CYCLOHEXANE	110-82-7	88-92	100ppm	300ppm

PHYSICAL DATA

Boiling Point: 71-3°C @ 2.5mm

Specific Gravity: 0.79

Vapor Density (air=1): >1

% volatiles (cyclohexane): >85

Molecular Weight: 190.32

Appearance & Color: Forms clear solutions with cyclohexane with amine-like odor

Melting Point: 61-2°C

Vapor Pressure, 20° (cyclohexane): 78mm

Solubility in water: reacts

Evaporation rate (Butyl Acetate=1): cyclohexane >1

Other: NA

FIRE & EXPLOSION DATA

Flash Point, TCC (cyclohexane): -20°C (-4°F) Autoignition Temp.: 260°C (cyclohexane)

Flammability Limits (cyclohexane)- LEL: 1.3% UEL: 8.3%

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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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: Vapors may cause immediate or delayed severe eye irritation. Liquid can cause severe conjunctivitis and corneal damage.

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 aminoalkylsilanes will irritate the respiratory tract. Overexposure may produce coughing, headache and nausea. Cycloheane inhalation may cause central nervous system (CNS) depression: dizziness, drowsiness, weakness, nausea, headache, unconsciousness.

Oral Toxicity: Oral toxicity is associated with methanol, a hydrolysis product, which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.

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.

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. Avoid contact with peroxides, oxidizing agents, alcohols, acids.

Hazardous decomposition products: Organic amine vapors, methanol.

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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 amine 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.

TRANSPORTATION

DOT SHIPPING NAME: CYCLOHEXANE

DOT HAZARD: 3

DOT LABELS: FLAMMABLE LIQUID

DOT ID No: UN1145

PG: II

Prepared by safety and environmental affairs

MSDS ISSUE DATE SID3543.1: 10/1/13
SUPERSEDES: none

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