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: **1,4-DISILABUTANE - SID4593.0**
CHEMICAL NAME: 1,4-DISILABUTANE
SYNONYMS: 1,2-ETHANEDIYLBIS(SILANE); DISILYLETHANE; 1,4-DSB
CHEMICAL FAMILY: ORGANOSILANE
FORMULA: $C_2H_{10}Si_2$
HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 2

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
1,4-DISILABUTANE	4364-07-2	>95	not established	

PHYSICAL DATA

Boiling Point: 45-6°C
Specific Gravity: 0.70
Vapor Density (air=1): >1
% volatiles: 100
Molecular Weight: 90.27
Freezing Point: -15 to -14°C
Vapor Pressure, 25°: not determined
Solubility in water: reacts
Evaporation rate (butyl acetate = 1): >1
Other: NA
Appearance & Color: Clear to straw liquid with mild odor

FIRE & EXPLOSION DATA

Vapors have been reported to spontaneously ignite on contact with air.

Flash Point, COC : -31°C (-24°F) Autoignition Temp.: 152°C
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 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: 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 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.

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): In the presence of platinum and Lewis acids this compound can generate flammable hydrogen gas. Avoid contact with alcohols, acids, oxidizers.
Hazardous decomposition products: Organic acid vapors, hydrogen.

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 under dry inert atmosphere. Store containers below 40°C. Containers can generate pressure during storage. Release pressure in an inert atmosphere.

Vapors can ignite spontaneously if heated or subjected to static discharge. Discharge of vapors through vacuum pumps has been reported to cause "cracking" or "popping" sounds associated with ignition.

TRANSPORTATION

DOT SHIPPING NAME: FLAMMABLE LIQUID, n.o.s.
(1,4-DISILABUTANE)
DOT HAZARD CLASS: 3
DOT LABEL: FLAMMABLE LIQUID
DOT ID No: UN1993 PG: II

Prepared by safety and environmental affairs ISSUE DATE SID4593.0: 11/15/10
SUPERSEDES: 2/6/09