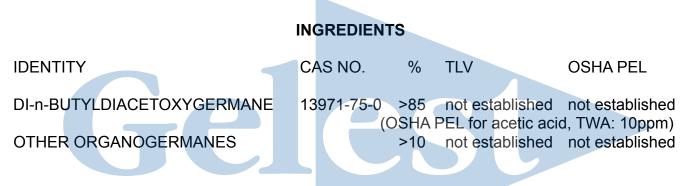
GELEST, INC. 11 East Steel Rd. Morrisville. PA 19067

Phone: (215) 547-1015

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

NAME USED ON LABEL: DI-n-BUTYLDIACETOXYGERMANE tech-90 - GED3150						
CHEMICAL NAME: DI-n-BUTYLDIACETOXYGERMANE						
SYNONYMS: DIBUTYLGERMANIUMDIACETATE, DIBUTYLDIACETOXYGERMANE						
CHEMICAL FAMILY: ORGANOGERMANE						
FORMULA: C ₁₂ H ₂₄ O ₄ Ge						
HMIS CODES	HEALTH: 2	FLAMMABILITY: 1	REACTIVITY: 1			



PHYSICAL DATA

Boiling Point: 127°C @ 5mm	Freezing Point: <0°C			
Specific Gravity: 1.44	Vapor Pressure, 20°: <1mm			
Vapor Density (air=1): >1	Solubility in water: insoluble			
% volatiles NA	Evaporation rate: NA			
Molecular Weight: 304.90	Other: NA			
Appearance & Color: Colorless liquid, characteristic odor				

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 and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(GED3150)

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

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: Dispose of absorbent material as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed eye irritation. The onset of irritation may not occur until several hours after exposure.

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 organoacetoxygermanes may irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Acute 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

Conditions to avoid: Combustible; avoid contact with heat, sparks or open flame.

Incompatibility (materials to avoid): Bases and reducing agents. Contact with water or moisture slowly generates hydrogen chloride.

Hazardous decomposition products: Organic acid vapors, germanium oxides

-2-(GED3150)

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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 use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: CORROSIVE LIQUID, N.O.S. (DI-n-BUTYLDIACETOXYGERMANE) DOT HAZARD CLASS: 8 DOT LABEL: CORROSIVE LIQUID DOT ID No: UN 1760 PG: II

Prepared by safety and environmental affairs

ISSUE DATE GED3150: 8/26/11 SUPERSEDES: none

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. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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