

**GELEST, INC.**

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **DI-n-BUTYLGERMANE - GED3300**

CHEMICAL NAME: DI-n-BUTYLGERMANE

SYNONYMS: DIBUTYLGERMANIUM HYDRIDE

CHEMICAL FAMILY: ORGANOGERMANIUM

FORMULA: (C<sub>4</sub>H<sub>9</sub>)<sub>2</sub>GeH<sub>2</sub>

HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 1

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV
DI-n-BUTYLGERMANE	29823-30-1	>95	not established
OTHER ORGANOGERMANIUMS		<5	not established

**PHYSICAL DATA**

Boiling Point: 70-5°C at 15mm

Specific Gravity: 0.978

Vapor Density (air=1): >1

% volatiles: NA

Molecular Weight: 188.84

Appearance & Color: Clear to straw liquid; mild odor

Freezing Point: <0°C

Vapor Pressure: not determined

Solubility in water: insoluble

Evaporation rate (butyl acetate = 1): <1

Other: NA

**FIRE & EXPLOSION DATA**

Flash Point, TCC: >65°C (>150°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-(GED3300)

## ENVIRONMENTAL INFORMATION

Spill response: 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 severe 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 organogermanes may irritate the respiratory tract.

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

Conditions to avoid: Combustible- avoid sparks and flame.

Incompatibility (materials to avoid): Oxidizers. Alkali or base materials may cause the release of small quantities of hydrogen gas.

Hazardous decomposition products: Organic acid vapors, hydrogen.

-2-(GED3300)

## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection:

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: CHEMICALS, NOS

DOT HAZARD CLASS: NONE REQUIRED

DOT LABEL: NONE REQUIRED

DOT ID No: NONE REQUIRED

Prepared by safety and environmental affairs

ISSUE DATE GED3300: 4/6/05

SUPERSEDES: none

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-3-(GED3300)

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