

**DIPHENYLDICHLOROGERMANE**

Safety Data Sheet GED4500

Date of issue: 03/13/2015 Version: 1.0

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Substance  
 Physical state : Liquid  
 Substance name : DIPHENYLDICHLOROGERMANE  
 Product code : GED4500  
 Formula : C<sub>12</sub>H<sub>10</sub>Cl<sub>2</sub>Ge  
 Synonyms : DIPHENYLGermanium dichloride; dichlorodiphenylgermane  
 Chemical family : ORGANOGermane

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance/mixture : Chemical intermediate  
 For research and industrial use only

**1.3. Details of the supplier of the safety data sheet****GELEST, INC.**

11 East Steel Road  
 Morrisville, PA 19067

**USA**

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

[info@gelest.com](mailto:info@gelest.com) - [www.gelest.com](http://www.gelest.com)

**1.4. Emergency telephone number**

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (GHS-US)**

Skin Corr. 1B H314

Eye Dam. 1 H318

Full text of H-phrases: see section 16

**2.2. Label elements****GHS-US labeling**

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H314 - Causes severe skin burns and eye damage  
 H318 - Causes serious eye damage

Precautionary statements (GHS-US) :

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P260 - Do not breathe vapors  
 P264 - Wash hands thoroughly after handling  
 P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
 P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. rinse skin with water/shower  
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a doctor  
 P363 - Wash contaminated clothing before reuse  
 P405 - Store locked up  
 P501 - Dispose of contents/container to licensed waste disposal facility.

**2.3. Other hazards**

No additional information available

**2.4. Unknown acute toxicity (GHS-US)**

No data available

# DIPHENYLDICHLOROGERMANE

## Safety Data Sheet

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Substance type	: Multi-constituent
Name	: DIPHENYLDICHLOROGERMANE
CAS No	: 1613-66-7
EC no	: 216-562-7

Name	Product identifier	%	Classification (GHS-US)
Diphenyldichlorolgermane	(CAS No) 1613-66-7	> 95	Skin Corr. 1B, H314 Eye Dam. 1, H318
Other Organogermanes		< 5	Not classified

#### 3.2. Mixture

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Get medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause irritation to the respiratory tract. Overexposure may cause: Coughing. Headache. Nausea.
Symptoms/injuries after skin contact	: Causes (severe) skin burns.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: May be harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in process area to prevent accumulation of vapors.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container tightly closed.
- Incompatible materials : Bases. Reducing agents.
- Storage area : Store in a well-ventilated place. Store away from heat.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

- Appropriate engineering controls : Provide local exhaust or general room ventilation.
- Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Hand protection : Neoprene or nitrile rubber gloves.
- Eye protection : Chemical goggles or face shield. Contact lenses should not be worn.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : NIOSH-certified combination organic vapor/acid gas (yellow cartridge) respirator.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Molecular mass : 297.71 g/mol
- Color : Colorless.
- Odor : Characteristic.
- Odor threshold : No data available
- Refractive index : 1.5975
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : 9 °C
- Boiling point : 223 °C @ 12 mm Hg
- Flash point : 160 °C
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapor pressure : 0.01 mm Hg @ 110°C
- Relative vapor density at 20 °C : > 1
- Relative density : 1.415
- Solubility : Insoluble in water.
- Log Pow : No data available
- Log Kow : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Explosive limits : No data available

#### 9.2. Other information

No additional information available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Contact with water or moisture slowly generates hydrogen chloride.

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

Bases. Reducing agents.

#### 10.6. Hazardous decomposition products

Hydrogen chloride. Organic acid vapors.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause irritation to the respiratory tract. Overexposure may cause: Coughing. Headache. Nausea.
Symptoms/injuries after skin contact	: Causes (severe) skin burns.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
Reason for classification	: Expert judgment

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other adverse effects	: This substance may be hazardous to the environment.
Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.
Ecology - waste materials	: Avoid release to the environment.

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## Safety Data Sheet

### SECTION 14: Transport information

#### 14.1. UN number

UN-No.(DOT) : 3265  
DOT NA no. UN3265

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive liquid, acidic, organic, n.o.s.  
(DIPHENYLDICHLOROGERMANE)  
Hazard Classes (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Hazard labels (DOT) : 8 - Corrosive



DOT Symbols : G - Identifies PSN requiring a technical name  
Packing group (DOT) : II - Medium Danger  
DOT Packaging Exceptions (49 CFR 173.xxx) : 154  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202  
DOT Packaging Bulk (49 CFR 173.xxx) : 242

#### 14.3. Additional information

Other information : No supplementary information available.

#### Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.  
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 1 L  
(49 CFR 173.27)  
DOT Quantity Limitations Cargo aircraft only (49 : 30 L  
CFR 175.75)

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Diphenyldichlorolgermane (1613-66-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

##### Diphenyldichlorolgermane (1613-66-7)

Listed on the Canadian NDSL (Non-Domestic Substances List)  
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 15.3. US State regulations

##### DIPHENYLDICHLOROGERMANE(1613-66-7)

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

##### Diphenyldichlorolgermane (1613-66-7)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

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Other Organogermenes				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

### SECTION 16: Other information

Abbreviations and acronyms : Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

Full text of H-phrases::

Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

#### HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given  
Flammability : 1 Slight Hazard  
Physical : 1 Slight Hazard

Prepared by safety and environmental affairs.

Date of issue: 03/13/2015 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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