SECTION 1: Identification

1.1. Identification

Product name: BIS(DIMETHYLAMINO)DIMETHYLSILANE
Product code: SIB1072.0
Product form: Substance
Physical state: Liquid
Formula: C₆H₁₈N₂Si
Synonyms: DIMETHYLBIS(DIMETHYLAMINO)SILANE; HEXAMETHYLSILANEDIAMINE
Chemical family: ORGANOSILANE

1.2. Recommended use and restrictions on use

Recommended use: Chemical intermediate

1.3. Supplier

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 - www.gelest.com

1.4. Emergency telephone number

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

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Flammable liquids Category 2 : H225 - Highly flammable liquid and vapor
Skin corrosion/irritation Category 1B : H314 - Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1 : H318 - Causes serious eye damage

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling
Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor
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.
P210 - Keep away from heat, open flames, sparks. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical equipment
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
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
P336 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use water spray, foam, carbon dioxide, dry chemical to extinguish.
P403+P235 - Keep in a cool place
P405 - Store locked up.
P501 - Dispose of contents/container to licensed waste disposal facility.
2.3. Hazards not otherwise classified (HNOC)
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
<table>
<thead>
<tr>
<th>Name</th>
<th>Substance type</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis(dimethylamino)dimethylsilane</td>
<td>Mono-constituent</td>
<td>(CAS-No.) 3768-58-9</td>
<td>95 - 100</td>
<td>Flam. Liq. 2, H225 Skin Corr. 1B, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures
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. Immediately call a poison center or doctor/physician. |

4.2. Most important symptoms and effects (acute and delayed)
| Symptoms/effects | Causes severe skin burns and eye damage. |
| Symptoms/effects after inhalation | May cause irritation to the respiratory tract. |
| Symptoms/effects after skin contact | Causes (severe) skin burns. |
| Symptoms/effects after eye contact | Causes serious eye damage. |
| Symptoms/effects after ingestion | May be harmful if swallowed. |

4.3. Immediate medical attention and special treatment, if necessary
No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media
| Specific hazards arising from the chemical | Highly flammable liquid and vapor. Irritating fumes of diethylamine and organic acid vapors may develop when material is exposed to water or open flame. |

5.3. Special protective equipment and precautions for fire-fighters
| 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
| General measures | Eliminate every possible source of ignition. Use special care to avoid static electric charges. |

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. Use only non-sparking tools.

6.4. **Reference to other sections**

See Heading 8. Exposure controls and personal protection.

**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. Take precautionary measures against static discharge. Containers must be properly grounded before beginning transfer. Use only non-sparking tools.

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**

Technical measures: Ground/bond container and receiving equipment. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment.

Storage conditions: Keep container tightly closed.


Storage area: Store in a well-ventilated place. Store away from heat.

**SECTION 8: Exposure controls/personal protection**

8.1. **Control parameters**

No additional information available.

8.2. **Appropriate engineering controls**

Appropriate engineering controls: Provide local exhaust or general room ventilation.

8.3. **Individual protection measures/Personal protective equipment**

**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 - amine gas (brown cartridge) respirator.

**SECTION 9: Physical and chemical properties**

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>146.31 g/mol</td>
</tr>
<tr>
<td>Color</td>
<td>Straw.</td>
</tr>
<tr>
<td>Odor</td>
<td>Acrid. Amine.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.4169</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-98 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>128 - 129 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>-3 °C</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable in sealed containers stored under a dry inert atmosphere.

10.3. Possibility of hazardous reactions
Reacts with water and moisture in air, liberating dimethylamine.

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Organic acid vapors. Dimethylamine.

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/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : Causes (severe) skin burns.
Symptoms/effects after eye contact : Causes serious eye damage.
Symptoms/effects 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 the ozone layer
: No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Product/Packaging disposal recommendations
: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.

Additional information
: Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials
: Avoid release to the environment.

### SECTION 14: Transport information

#### 14.1. UN number

| UN-No.(DOT) | 2924 |
| DOT NA no. | UN2924 |

#### 14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>Transport document description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN2924 Flammable liquids, corrosive, n.o.s. (BIS(DIMETHYLAMINO)DIMETHYLSILANE), 3 (8), II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proper Shipping Name (DOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids, corrosive, n.o.s. BIS(DIMETHYLAMINO)DIMETHYLSILANE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class (DOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - Class 3: Flammable and combustible liquid 49 CFR 173.120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group (DOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>II - Medium Danger</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard labels (DOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - Flammable liquid 6 - Corrosive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOT Packaging Non Bulk (49 CFR 173.xxx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOT Packaging Bulk (49 CFR 173.xxx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>243</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOT Packaging Exceptions (49 CFR 173.xxx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOT Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>G - Identifies PSN requiring a technical name</td>
</tr>
</tbody>
</table>

#### 14.3. Additional information

<table>
<thead>
<tr>
<th>Emergency Response Guide (ERG) Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>132</td>
</tr>
</tbody>
</table>

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 (49 CFR 173.27)
: 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)
: 5 L

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations
BIS(DIMETHYLAMINO)DIMETHYLSILANE
Safety Data Sheet

15.2. International regulations

CANADA
Bis(dimethylamino)dimethylsilane (3768-58-9)
Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations
Bis(dimethylamino)dimethylsilane (3768-58-9)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations
Bis(dimethylamino)dimethylsilane (3768-58-9)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H225</th>
<th>Highly flammable liquid and vapor</th>
</tr>
</thead>
<tbody>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
</tbody>
</table>

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; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

Hazard Rating
Health: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability: 4 Severe Hazard - Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)
Physical: 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Prepared by safety and environmental affairs.

Date of issue: 01/07/2015
Revision date: 04/08/2019
Version: 1.1

SDS US (GHS HazCom 2012) - Custom

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

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.

© 2019 Gelest Inc. Morrisville, PA 19067