SECTION 1: Identification

1.1. Identification
Product name: n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE
Product code: SIO6711.3
Product form: Substance
Physical state: Liquid
Formula: C12H29NSi
Synonyms: DIMETHYLAMINOOCYLIDIMETHYLSILANE
Chemical family: ORGANOSILANE

1.2. Recommended use and restrictions on use
Recommended use: Chemical intermediate
For research use only

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 4
Combustible liquid
Skin corrosion/irritation Category 1C
Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1
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): 
Hazard statements (GHS-US): H227 - Combustible liquid
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
P310 - Keep away from heat, open flames, sparks. - No smoking
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>Substance type</th>
<th>Name</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mono-constituent</td>
<td>n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE</td>
<td>110348-62-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Octyldimethyl(dimethylamino)silane</td>
<td>(CAS No) 110348-62-4</td>
<td>&gt; 95</td>
<td>Flam. Liq. 4, H227, Skin Corr. 1C, H314, Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Dimethylamine</td>
<td>(CAS No) 124-40-3</td>
<td></td>
<td>Flam. Gas 1, H220, Acute Tox. 4 (Inhalation), H332, Skin Irrit. 2, H315, Eye Dam. 1, H318, STOT SE 3, H335</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. Get medical advice/attention if you feel unwell.

#### 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. Overexposure may cause: Coughing. Headache. Nausea.

**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

#### 5.2. Specific hazards arising from the chemical

**Fire hazard:** Combustible liquid. Irritating fumes of diethylamine and organic acid vapors may develop when material is exposed to water or open flame.

**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

**For non-emergency personnel**

**Emergency procedures:** Evacuate unnecessary personnel.

**For emergency responders**

**Protective equipment:** Equip cleanup crew with proper protection.
n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE
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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: All transfers should be maintained under a dry inert atmosphere of nitrogen or argon. Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in process area to prevent accumulation of vapors. Use only non-sparking tools.

Hygiene measures: Wash contaminated clothing before reuse. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions: Keep container tightly closed. Store in sealed containers under a dry inert atmosphere of nitrogen or argon.
Storage area: Store in a well-ventilated place. Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Dimethylamine (124-40-3)</th>
<th>ACGIH TWA (ppm)</th>
<th>5 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>15 ppm</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>18 mg/m³</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (ppm)</td>
<td>10 ppm</td>
</tr>
<tr>
<td>IDLH</td>
<td>US IDLH (ppm)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
<td>18 mg/m³</td>
</tr>
<tr>
<td>NIOSH</td>
<td>NIOSH REL (TWA) (ppm)</td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

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:
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. 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
Physical state: Liquid
### Appearance
Clear liquid.

### Molecular mass
215.45 g/mol

### Color
Straw.

### Odor threshold
No data available

### Refractive index
1.4347

### pH
No data available

### Relative evaporation rate (butyl acetate=1)
No data available

### Melting point
No data available

### Freezing point
< 0 °C

### Boiling point
94 °C @ 10 mm Hg

### Flash point
69 °C

### Auto-ignition temperature
No data available

### Decomposition temperature
No data available

### Flammability (solid, gas)
Combustible liquid

### Vapor pressure
< 1 mm Hg @ 25°C

### Relative vapor density at 20 °C
> 1

### Relative density
0.8

### Solubility
Reacts with 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

### Explosion limits
No data available

### 9.2. Other information
No additional information available

### 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

<table>
<thead>
<tr>
<th>Dimethylamine (124-40-3)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>698 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>3900 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>4540 ppm (Exposure time: 6 h)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>698 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>3900 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>4500 ppmV/4h</td>
</tr>
<tr>
<td>ATE US (vapors)</td>
<td>11 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust, mist)</td>
<td>1.5 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns and eye damage.
n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE
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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. Overexposure may cause: Coughing. Headache. Nausea.
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.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Dimethylamine (124-40-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
</tr>
<tr>
<td>LC50 fish 2</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Dimethylamine (124-40-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
</tr>
</tbody>
</table>

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: May be incinerated. 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.

SECTION 14: Transport information

14.1. UN number
UN-No.(DOT): 1760
DOT NA no.: UN1760

14.2. UN proper shipping name
Transport document description: UN1760 Corrosive liquids, n.o.s. (n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE), 8, III
Proper Shipping Name (DOT): Corrosive liquids, n.o.s. (n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE)
Class (DOT): 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT): III - Minor Danger
Hazard labels (DOT): 8 - Corrosive

DOT Packaging Non Bulk (49 CFR 173.xxx): 203
n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE
Safety Data Sheet

DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Symbols : G - Identifies PSN requiring a technical name

14.3. Additional information
Emergency Response Guide (ERG) Number : 60
Other information : No supplementary information available.

Transport by sea
DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other : 40 - Stow “clear of living quarters”

Air transport
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

SECTION 15: Regulatory information
15.1. US Federal regulations
n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE (110348-62-4)
TSCA Exemption/Exclusion
CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a “technically qualified individual” as defined by 40 CFR 720.3(ee). The use of this material for “commercial purposes” as defined by 40 CFR 720.3(r) is not permitted in the United States.

n-Octyldimethyl(dimethylamino)silane (110348-62-4)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Dimethylamine (124-40-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313
SARA Section 313 - Emission Reporting 1 %

15.2. International regulations
CANADA
No additional information available

Dimethylamine (124-40-3)
Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification
Class A - Compressed Gas
Class B Division 1 - Flammable Gas
Class E - Corrosive Material

EU-Regulations
No additional information available

Dimethylamine (124-40-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Dimethylamine (124-40-3)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed on INSC (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

Print date: 01/29/2018 EN (English US) SDS ID: SIO6711.3

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n-OCTYLDIMETHYL(DIMETHYLAMINO)SILANE

Safety Data Sheet

Dimethylamine (124-40-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

- **H220**: Extremely flammable gas
- **H227**: Combustible liquid
- **H314**: Causes severe skin burns and eye damage
- **H315**: Causes skin irritation
- **H318**: Causes serious eye damage
- **H332**: Harmful if inhaled
- **H335**: May cause respiratory irritation

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.

HMIS III Rating

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

Flammability: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

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: 01/08/2015
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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Print date: 01/29/2018
EN (English US) SDS ID: SIO6711.3