SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Gas</td>
</tr>
<tr>
<td>Substance name</td>
<td>1,3-DISILAPROPANE</td>
</tr>
<tr>
<td>Product code</td>
<td>SID4595.0</td>
</tr>
<tr>
<td>Formula</td>
<td>CH8Si2</td>
</tr>
<tr>
<td>Synonyms</td>
<td>DISILMET, HYLENE</td>
</tr>
<tr>
<td>Chemical family</td>
<td>ORGANOHYDRIDOSILANE</td>
</tr>
</tbody>
</table>

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

1.2.1. Relevant identified uses

| Use of the substance/mixture | Chemical intermediate |

1.2.2. Uses advised against

No additional information available.

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 - www.gelest.com

**GELEST INC.**
Fritz-Klatte-Strasse 8
65933 Frankfurt
Germany
T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM
info@gelestde.com - www.gelestde.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 according to Regulation (EC) No. 1272/2008 [CLP]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable gases, Category 1</td>
<td>H220</td>
</tr>
<tr>
<td>Gases under pressure: Liquefied gas</td>
<td>H280</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation, Category 2</td>
<td>H319</td>
</tr>
</tbody>
</table>

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

<table>
<thead>
<tr>
<th>Hazard pictograms (CLP)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS02</td>
<td>GHS07</td>
</tr>
</tbody>
</table>

Signal word (CLP): Danger

Hazard statements (CLP):

- H220: Extremely flammable gas.
- H280: Contains gas under pressure; may explode if heated.
- H319: Causes serious eye irritation.
Precautionary statements (CLP)

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 - In case of leakage, eliminate all ignition sources.
P403 - Store in a well-ventilated place.
P410+P403 - Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type: Mono-constituent
Name: 1,3-DISILAPROPAINE
CAS-No.: 1759-88-2

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-Disilapropane</td>
<td>(CAS-No.) 1759-88-2</td>
<td>&gt; 95</td>
<td>Flam. Gas 1, H220 Press. Gas (Liq.), H280 Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

Full text of 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 person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of water/….

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get 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/effects after inhalation: May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.

Symptoms/effects after skin contact: May cause skin irritation.

Symptoms/effects after eye contact: Causes serious eye irritation.

Symptoms/effects after ingestion: No information available.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture

Fire hazard: Extremely flammable gas. Irritating fumes may develop when material is exposed to water or open flame.

Explosion hazard: Vapors have been reported to spontaneously ignite on contact with air.

5.3. Advice for firefighters

Firefighting instructions: Eliminate all ignition sources if safe to do so. 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 vapour and mist.
### SECTION 6: Accidental release measures

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

**General measures**: Use special care to avoid static electric charges. Eliminate every possible source of ignition.

**For non-emergency personnel**

**Emergency procedures**: Evacuate unnecessary personnel.

**For emergency responders**

**Protective equipment**: Equip cleanup crew with proper protection.

#### 6.2. Environmental precautions

No additional information available.

#### 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

**Additional hazards when processed**: Extremely flammable gas. Handle empty containers with care because residual vapours are flammable.

**Precautions for safe handling**: Avoid all eye and skin contact and do not breathe vapour and mist. Containers must be properly grounded before beginning transfer. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Release pressure in an inert atmosphere. Vapors can ignite spontaneously if heated or subjected to static discharge. Discharge of vapors through vacuum pumps has been reported to cause “cracking” or “popping” sounds associated with ignition.

**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**: Proper grounding procedures to avoid static electricity should be followed.

**Storage conditions**: Keep container tightly closed. Store in sealed containers under dry inert atmosphere. Store containers below 40°C. Containers can generate pressure during storage.

**Incompatible materials**: Acids, alcohols, Oxidizing agent.

**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

<table>
<thead>
<tr>
<th>1,3-DISILAPROPANE (1759-88-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
</tr>
<tr>
<td>TWA (mg/m³)</td>
</tr>
<tr>
<td>Australia</td>
</tr>
</tbody>
</table>

#### 8.2. Exposure controls

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

**Personal protective equipment**: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Avoid all unnecessary exposure.

**Hand protection**: Neoprene or nitrile rubber gloves

**Eye protection**: Chemical goggles. Contact lenses should not be worn

**Skin and body protection**: Wear suitable protective clothing

**Respiratory protection**: 

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EN (English)  
SDS ID: SID4595.0  
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Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. 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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Gas</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless gas.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>76.24 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.4115</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt; 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>14.7 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&lt; 0 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&lt; 75 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Extremely flammable gas.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.697</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>100 %</td>
</tr>
<tr>
<td>Solubility</td>
<td>Reacts with water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**9.2. Other information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas group</td>
<td>Press. Gas (Liq.)</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**

In the presence of platinum and Lewis acids this compound can generate flammable hydrogen gas.

**10.4. Conditions to avoid**

Heat. Sparks. Open flame.

**10.5. Incompatible materials**

Acids. alcohols. Oxidizing agent.

**10.6. Hazardous decomposition products**


### SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
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Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
STOT-single exposure: Not classified
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified
Symptoms/effects after inhalation: May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.
Symptoms/effects after skin contact: May cause skin irritation.
Symptoms/effects after eye contact: Causes serious eye irritation.
Symptoms/effects after ingestion: No information available.
Reason for classification: Expert judgment

SECTION 12: Ecological information

12.1. Toxicity
Acute aquatic toxicity: Not classified
Chronic aquatic toxicity: Not classified

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. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
Other adverse effects: This substance may be hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment 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.
Additional information: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number
In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR) : 3161
UN-No. (IMDG) : 3161
UN-No. (IATA) : 3161
UN-No. (ADN) : 3161
UN-No. (RID) : 3161

14.2. UN proper shipping name
Proper Shipping Name (ADR) : LIQUEFIED GAS, FLAMMABLE, N.O.S.
Proper Shipping Name (IMDG) : LIQUEFIED GAS, FLAMMABLE, N.O.S.
Proper Shipping Name (IATA) : Liquefied gas, flammable, n.o.s.
Proper Shipping Name (ADN) : LIQUEFIED GAS, FLAMMABLE, N.O.S.
Proper Shipping Name (RID) : LIQUEFIED GAS, FLAMMABLE, N.O.S.
Transport document description (ADR) : UN 3161 LIQUEFIED GAS, FLAMMABLE, N.O.S. (1,3-DISILAPROPANE), 2.1, (B/D)
Transport document description (IMDG) : UN 3161 LIQUEFIED GAS, FLAMMABLE, N.O.S. (1,3-DISILAPROPANE), 2.1
Transport document description (IATA) : UN 3161 Liquefied gas, flammable, n.o.s. (1,3-DISILAPROPANE), 2.1
Transport document description (ADN) : UN 3161 LIQUEFIED GAS, FLAMMABLE, N.O.S. (1,3-DISILAPROPANE), 2.1
Transport document description (RID) : UN 3161 LIQUEFIED GAS, FLAMMABLE, N.O.S. (1,3-DISILAPROPANE), 2.1
### 14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Transport agency</th>
<th>Transport hazard class(es)</th>
<th>Danger labels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADR</strong></td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>IMDG</strong></td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>ADN</strong></td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>RID</strong></td>
<td>2.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### 14.4. Packing group

<table>
<thead>
<tr>
<th>Packing group</th>
<th>Packing class</th>
<th>Danger labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>ADN</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>RID</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

### 14.5. Environmental hazards

- Dangerous for the environment: No
- Marine pollutant: No
- Other information: No supplementary information available
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14.6. Special precautions for user

- Overland transport

Classification code (ADR) : 2F
Special provisions (ADR) : 274, 662
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P200
Mixed packing provisions (ADR) : MP9
Portable tank and bulk container instructions (ADR) : (M), T50
Tank code (ADR) : PxBN(M)
Tank special provisions (ADR) : TA4, TT9
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Loading, unloading and handling (ADR) : CV9, CV10, CV36
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 23
Orange plates : 23

Tunnel restriction code (ADR) : B/D
EAC code : 2YE

- Transport by sea

Special provisions (IMDG) : 274
Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E0
Packing instructions (IMDG) : P200
Tank instructions (IMDG) : T50
EmS-No: (Fire) : F-D
EmS-No: (Spillage) : S-U
Stowage category (IMDG) : D
Stowage and handling (IMDG) : SW2

- Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : Forbidden
CAO packing instructions (IATA) : 200
CAO max net quantity (IATA) : 150kg
Special provisions (IATA) : A1
ERG code (IATA) : 10L

- Inland waterway transport

Classification code (ADN) : 2F
Special provisions (ADN) : 274
Limited quantities (ADN) : 0
Excepted quantities (ADN) : E0
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

- Rail transport

Special provisions (RID) : 274, 662
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Limited quantities (RID) : 0
Excepted quantities (RID) : E0
Packing instructions (RID) : P200
Mixed packing provisions (RID) : MP9
Portable tank and bulk container instructions (RID) : T50(M)
Tank codes for RID tanks (RID) : PxBN(M)
Special provisions for RID tanks (RID) : TU38, TE22, TA4, TT9, TM6
Transport category (RID) : 2
Special provisions for carriage - Loading, unloading and handling (RID) : CW9, CW10, CW36
Colis express (express parcels) (RID) : CE3
Hazard identification number (RID) : 23

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
No REACH Annex XVII restrictions
1,3-DISILAPROPANE is not on the REACH Candidate List
1,3-DISILAPROPANE is not on the REACH Annex XIV List
1,3-DISILAPROPANE is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

% Volatiles : 100 %

15.1.2. National regulations

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands
SZW-list van kankerverwekkende stoffen : The substance is not listed
SZW-list van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark
Class for fire hazard : Class I-1
Store unit : 1 liter
Classification remarks : F+ <Flam. Gas 1; Press. Gas (Liq.); Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Abbreviations and acronyms:
1,3-DISILAPROPANE
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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

Other information: Prepared by safety and environmental affairs.

Full text of H- and EUH- statements:

| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Gas 1 | Flammable gases, Category 1 |
| Press. Gas (Liq.) | Gases under pressure: Liquefied gas |
| H220 | Extremely flammable gas. |
| H280 | Contains gas under pressure; may explode if heated. |
| H319 | Causes serious eye irritation. |

SDS EU (REACH Annex II) - Custom

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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