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

1.1. Product identifier

- Product form: Substance
- Physical state: Liquid
- Substance name: SILANOL TERMINATED POLYDIMETHYLSILOXANE
- Product code: DMS-S31
- Synonyms: HYDROXY TERMINATED POLYDIMETHYLSILOXANE
- Chemical family: ORGANOSILOXANE
- REACH authorisation exemptions: Exempted from REACH registration

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]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
EUH-statements: EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains PBT/vPvB substances >= 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

- Substance type: Polymer
- Name: SILANOL TERMINATED POLYDIMETHYLSILOXANE
- CAS-No.: 70131-67-8
SILANOL TERMINATED POLYDIMETHYLSILOXANE
Safety Data Sheet

<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>Silanol terminated polydimethylsiloxane</td>
<td>(CAS-No.) 70131-67-8 (EC-No.) 615-070-3</td>
<td>&gt; 97</td>
<td>Not classified</td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane substance listed as REACH Candidate (Octamethylcyclotetrasiloxane (D4))</td>
<td>(CAS-No.) 556-67-2 (EC-No.) 209-136-7</td>
<td>&lt; 3</td>
<td>Repr. 2, H361f Aquatic Chronic 4, H413</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/…. Get medical advice/attention. |
| First-aid measures after eye contact | Immediately flush eyes thoroughly with water for at least 15 minutes. 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 be harmful if inhaled. |
| Symptoms/effects after skin contact | May cause skin irritation. |
| Symptoms/effects after eye contact | May cause 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

| Unsuitable extinguishing media | None known. |

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 or fog for cooling exposed containers. 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

6.1.1. For non-emergency personnel

| Protective equipment | Wear protective equipment as described in Section 8. |
| Emergency procedures | Evacuate unnecessary personnel. |

6.1.2. For emergency responders

| Protective equipment | Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal 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

| For containment | Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. |
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.

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 vapour and mist. Spillage of this material may create a slippery condition for foot or vehicle traffic. Use only in well ventilated areas.

Hygiene measures: Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container tightly closed.
Incompatible materials: 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
No additional information available

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:
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black 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: 26000 g/mol
Colour: No data available
Odour: Mild menthol-like aroma.
Odour threshold: No data available
Refractive index: 1.403
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: < -60 °C
Freezing point: No data available
Boiling point: > 205 °C
Flash point: 205 °C
Auto-ignition temperature: No data available
Decomposition temperature: No data available
SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
No additional information available

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

10.5. Incompatible materials
Oxidizing agent.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Octamethylcyclotetrasiloxane (556-67-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1540 mg/kg RTECS Number: GZ4397000</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>1770 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>794 µl/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>36 g/m³ (Exposure time: 4 h)</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>1540 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (dermal)</td>
<td>1770 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (vapours)</td>
<td>36 mg/l/4h</td>
</tr>
<tr>
<td>ATE CLP (dust,mist)</td>
<td>36 mg/l/4h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Silanol terminated polydimethylsiloxane (70131-67-8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 15400 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 16 ml/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 8750 mg/m³ (Exposure time: 7 h)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
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 be harmful if inhaled.

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

### Symptoms/effects after eye contact
May cause eye irritation.

### Symptoms/effects after ingestion
No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute aquatic toxicity
Not classified

#### Chronic aquatic toxicity
Not classified

<table>
<thead>
<tr>
<th>Octamethylcyclotetrasiloxane (556-67-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>&gt; 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Octamethylcyclotetrasiloxane (556-67-2)</th>
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</thead>
<tbody>
<tr>
<td>LC50 fish 2</td>
</tr>
<tr>
<td>&gt; 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)</td>
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</table>

### 12.2. Persistence and degradability
No additional information available

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Octamethylcyclotetrasiloxane (556-67-2)</th>
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<tbody>
<tr>
<td>BCF fish 1</td>
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<tr>
<td>12400</td>
</tr>
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<table>
<thead>
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<tbody>
<tr>
<td>Log Pow</td>
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<tr>
<td>5.1</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil
No additional information available

### 12.5. Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Octamethylcyclotetrasiloxane (556-67-2)</th>
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<tbody>
<tr>
<td>This substance/mixture meets the PBT criteria of REACH regulation, annex XIII</td>
<td></td>
</tr>
<tr>
<td>This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII</td>
<td></td>
</tr>
</tbody>
</table>

### 12.6. Other adverse effects
No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Sewage disposal recommendations
Do not dispose of waste into sewer.

#### Product/Packaging disposal recommendations
Incinerate. Dispose in a safe manner in accordance with local/national regulations.

#### Ecology - waste materials
Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

#### UN number

| UN-No. (ADR) | Not applicable |
| UN-No. (IMDG) | Not applicable |
| UN-No. (IATA) | Not applicable |
| UN-No. (ADN) | Not applicable |
| UN-No. (RID) | Not applicable |

#### UN proper shipping name

| Proper Shipping Name (ADR) | Not applicable |
| Proper Shipping Name (IMDG) | Not applicable |
| Proper Shipping Name (IATA) | Not applicable |
| Proper Shipping Name (ADN) | Not applicable |
| Proper Shipping Name (RID) | Not applicable |

#### Transport hazard class(es)

| ADR |
| Transport hazard class(es) (ADR) | Not applicable |

| IMDG |
| Transport hazard class(es) (IMDG) | Not applicable |
SILANOL TERMINATED POLYDIMETHYLSILOXANE
Safety Data Sheet

14.4. Packing group

<table>
<thead>
<tr>
<th>Packing group</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group (ADR)</td>
<td></td>
</tr>
<tr>
<td>Packing group (IMDG)</td>
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<tr>
<td>Packing group (IATA)</td>
<td></td>
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<tr>
<td>Packing group (ADN)</td>
<td></td>
</tr>
<tr>
<td>Packing group (RID)</td>
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</tr>
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</table>

14.5. Environmental hazards

<table>
<thead>
<tr>
<th>Hazard</th>
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<tbody>
<tr>
<td>Dangerous for the environment</td>
<td>No</td>
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<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>Other information</td>
<td>No supplementary information available</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

- Overland transport
  No data available

- Transport by sea
  No data available

- Air transport
  No data available

- Inland waterway transport
  No data available

- Rail transport
  No data available

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
SILANOL TERMINATED POLYDIMETHYLSILOXANE is not on the REACH Candidate List
Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: Octamethylcyclotetrasiloxane (D4) (EC 209-136-7, CAS 556-67-2)
SILANOL TERMINATED POLYDIMETHYLSILOXANE is not on the REACH Annex XIV List
SILANOL TERMINATED POLYDIMETHYLSILOXANE 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 : < 3 %

15.1.2. National regulations

Germany
Reference to AwSV : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 543)
SILANOL TERMINATED POLYDIMETHYLSILOXANE
Safety Data Sheet

Netherlands
SZW-lijst van kankerverwekkende stoffen: The substance is not listed
SZW-lijst 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

15.2. Chemical safety assessment
No additional information available

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; 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:

<table>
<thead>
<tr>
<th>Acute Chronic 4</th>
<th>Hazardous to the aquatic environment — Chronic Hazard, Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repr. 2</td>
<td>Reproductive toxicity, Category 2</td>
</tr>
<tr>
<td>H361f</td>
<td>Suspected of damaging fertility.</td>
</tr>
<tr>
<td>H413</td>
<td>May cause long lasting harmful effects to aquatic life.</td>
</tr>
<tr>
<td>EUH210</td>
<td>Safety data sheet available on request.</td>
</tr>
</tbody>
</table>

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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