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

<table>
<thead>
<tr>
<th>1.1. Product identifier</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product form</td>
<td>Substance</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Substance name</td>
<td>[BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE</td>
</tr>
<tr>
<td>Product code</td>
<td>DMS-CA21</td>
</tr>
<tr>
<td>Synonyms</td>
<td>POLY(DIMETHYSILOXANE), [BIS(HYDROXYETHYL)AMINE TERMINATED SILOXANES AND SILICONES, DI-ME, 3-[BIS(2-HYDROXYETHYL)AMINO]PROPYL GROUP-TERMINATED</td>
</tr>
<tr>
<td>Chemical family</td>
<td>ORGANOSILOXANE</td>
</tr>
<tr>
<td>REACH authorisation exemptions</td>
<td>Exempted from REACH registration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.2. Relevant identified uses of the substance or mixture and uses advised against</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1. Relevant identified uses</td>
<td></td>
</tr>
<tr>
<td>Use of the substance/mixture</td>
<td>Chemical intermediate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.3. Details of the supplier of the safety data sheet</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GELEST, INC.</td>
<td></td>
</tr>
<tr>
<td>11 East Steel Road</td>
<td></td>
</tr>
<tr>
<td>Morrisville, PA 19067</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td></td>
</tr>
<tr>
<td>T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:info@gelest.com">info@gelest.com</a> - <a href="http://www.gelest.com">www.gelest.com</a></td>
<td></td>
</tr>
</tbody>
</table>

| 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                 |  |

<table>
<thead>
<tr>
<th>1.4. Emergency telephone number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency number</td>
<td>CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)</td>
</tr>
</tbody>
</table>

### SECTION 2: Hazards identification

<table>
<thead>
<tr>
<th>2.1. Classification of the substance or mixture</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification according to Regulation (EC) No. 1272/2008 [CLP]</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Adverse physicochemical, human health and environmental effects

No additional information available

<table>
<thead>
<tr>
<th>2.2. Label elements</th>
<th></th>
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<tbody>
<tr>
<td>Labelling according to Regulation (EC) No. 1272/2008 [CLP]</td>
<td></td>
</tr>
<tr>
<td>EUH-statements</td>
<td>EUH210 - Safety data sheet available on request.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.3. Other hazards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>3.1. Substances</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance type</td>
<td>Polymer</td>
</tr>
<tr>
<td>Name</td>
<td>[BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>2024596-86-7</td>
</tr>
</tbody>
</table>
Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP]
--- | --- | --- | ---
[Bis(hydroxyethyl)amine] terminated polydimethylsiloxane | (CAS-No.) 2024596-86-7 | 95 - 100 | Not classified

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. 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 : No information available.
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 : For further information refer to section 8: “Exposure controls/personal protection”. Equip cleanup crew with proper protection. Do not attempt to take action without suitable protective equipment.

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.

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. Store in a cool area. Store in a dark area.

Incompatible materials: Oxidizing agent.

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. 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. 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: 3000 g/mol
Colour: Straw.
Odour: Mild. Amine.
Odour threshold: No data available
Refractive index: 1.414
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
Flammability (solid, gas): No data available
# [BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE

## Safety Data Sheet

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.97</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in 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>120 - 160 cSt</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
No additional information 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
Organic acid vapors. Silicon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</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>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Symptoms/effects after inhalation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>May cause skin irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>May cause eye irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after ingestion</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

## SECTION 12: Ecological information

### 12.1. Toxicity

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute aquatic toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

### 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
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**

#### 14.1.1. 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

#### 14.2. 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

#### 14.3. Transport hazard class(es)

- **ADR**
  - Transport hazard class(es) (ADR) : Not applicable

- **IMDG**
  - Transport hazard class(es) (IMDG) : Not applicable

- **IATA**
  - Transport hazard class(es) (IATA) : Not applicable

- **ADN**
  - Transport hazard class(es) (ADN) : Not applicable

- **RID**
  - Transport hazard class(es) (RID) : Not applicable

#### 14.4. Packing group

- **Packing group (ADR)** : Not applicable
- **Packing group (IMDG)** : Not applicable
- **Packing group (IATA)** : Not applicable
- **Packing group (ADN)** : Not applicable
- **Packing group (RID)** : Not applicable

#### 14.5. Environmental hazards

- **Dangerous for the environment** : No
- **Marine pollutant** : No
- **Other information** : No supplementary information available
[BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE
Safety Data Sheet

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
[BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE is not on the REACH Candidate List
[BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE is not on the REACH Annex XIV List
[BIS(HYDROXYETHYL)AMINE] 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.

15.1.2. National regulations

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

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

Indication of changes:
Applied changes to sections 4, 7.1-7.2 and 8.1. Added statement to sections 13 and 6.3.

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:
[BIS(HYDROXYETHYL)AMINE] TERMINATED POLYDIMETHYLSILOXANE
Safety Data Sheet

EUH210 Safety data sheet available on request.

SDS EU (REACH Annex II) - Custom

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