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

1.1. Product identifier

Product form: Substance
Physical state: Solid
Substance name: SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED
Product code: SIS6962.0
Formula: SiO2
Synonyms: FUMED SILICA, HMDZ TREATED
Chemical family: INORGANIC SILICATE

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]
No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type: Multi-constituent
Name: SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED
CAS-No.: 68909-20-6 / 7631-86-9
EC-No.: 272-697-1
**Name** | **Product identifier** | **%** | **Classification according to Regulation (EC) No. 1272/2008 [CLP]**
--- | --- | --- | ---
Silicon dioxide, amorphous, hexamethyldisilazane treated | (CAS-No.) 68909-20-6 (EC-No.) 272-697-1 | > 97 | Not classified
Silica, amorphous | (CAS-No.) 7631-86-9 (EC-No.) 231-545-4 |  | 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/….  

**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**: 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**: May cause eye irritation.

**Symptoms/effects after ingestion**: May be harmful if swallowed.

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

**SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable extinguishing media**: Not combustible.

#### 5.2. Special hazards arising from the substance or mixture

**Fire hazard**: None known.

#### 5.3. Advice for firefighters

**Protection during firefighting**: Avoid contact with skin and eyes. Do not breathe dust.

**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.

#### 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**: 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

**Additional hazards when processed**: While not flammable, the ability of fumed silica to generate static charge may present a hazard when used in combination with flammable liquids.
SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED
Safety Data Sheet

Precautions for safe handling: Provide local exhaust or general room ventilation to minimize exposure to dust. Avoid contact with skin and eyes. Do not breathe dust.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a dry place. Absorbs moisture. Store in sealed containers.

Incompatible materials: Strong oxidizers.

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>Silicon dioxide, amorphous, hexamethyldisilazane treated (68909-20-6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH TWA (mg/m³) 0.1 mg/m³ (total dust containing &lt;1% quartz)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³) 15 mg/m³ (nuisance dust)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Silica, amorphous (7631-86-9)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>MAK (mg/m³) 4 mg/m³ (also Silica manufactured through wet process-inhalable fraction)</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (mg/m³) 4 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)</td>
</tr>
<tr>
<td>Latvia</td>
<td>OEL TWA (mg/m³) 1 mg/m³</td>
</tr>
<tr>
<td>USA IDLH</td>
<td>US IDLH (mg/m³) 3000 mg/m³</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³) 6 mg/m³</td>
</tr>
<tr>
<td>Switzerland</td>
<td>MAK (mg/m³) 4 mg/m³ (inhalable dust, also manufactured in wet processing)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³) 6 mg/m³ (inhalable dust) 2.4 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL (mg/m³) 18 mg/m³ (calculated-inhalable dust) 7.2 mg/m³ (calculated-respirable dust)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Expoziční limity (PEL) (mg/m³) 0.1 mg/m³ (respirable fraction) 4 mg/m³</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP-arvo (8h) (mg/m³) 5 mg/m³</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL (8 hours ref) (mg/m³) 6 mg/m³ (total inhalable dust) 2.4 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL (15 min ref) (mg/m³) 18 mg/m³ (calculated-total inhalable dust) 7.2 mg/m³ (calculated-respirable dust)</td>
</tr>
<tr>
<td>Norway</td>
<td>Grenseverdier (AN) (mg/m³) 1.5 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Norway</td>
<td>Grenseverdier (Korttidsverdi) (mg/m³) 1.5 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Slovakia</td>
<td>NPHV (priemerná) (mg/m³) 4 mg/m³ (total aerosol)</td>
</tr>
<tr>
<td>Australia</td>
<td>TWA (mg/m³) 2 mg/m³ (respirable dust)</td>
</tr>
</tbody>
</table>

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:

Safety glasses. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection. NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- **Physical state**: Solid
- **Appearance**: Powder
- **Molecular mass**: 60.09 g/mol
- **Colour**: White
- **Odour**: No data available
- **Odour threshold**: No data available
- **Refractive index**: 1.45
- **pH**: No data available
- **Relative evaporation rate (butylacetate=1)**: No data available
- **Melting point**: > 1600 °C
- **Freezing point**: No data available
- **Boiling point**: No data available
- **Flash point**: No data available
- **Auto-ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Flammability (solid, gas)**: No data available
- **Vapour pressure**: < 0.01 mm Hg @ 20°C
- **Relative vapour density at 20 °C**: No data available
- **Relative density**: 2.2
- **Solubility**: Insoluble in 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
- **Oxidising properties**: No data available
- **Explosive 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

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

None known

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

None known

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- **Acute toxicity**: Not classified

  Silicon dioxide, amorphous, hexamethyldisilazane treated (68909-20-6)
  - LD50 oral rat: > 5000 mg/kg
SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED
Safety Data Sheet

**Silica, amorphous (7631-86-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 2.2 mg/l (Exposure time: 1 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

**Silicon dioxide, amorphous, hexamethyldisilazane treated (68909-20-6)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
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**Silica, amorphous (7631-86-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<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>May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.</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>May be harmful if swallowed.</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

12.1. **Toxicity**

Acute aquatic toxicity: Not classified
Chronic aquatic toxicity: Not classified

**Silica, amorphous (7631-86-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)</td>
</tr>
</tbody>
</table>

12.2. **Persistence and degradability**

No additional information available

12.3. **Bioaccumulative potential**

**Silica, amorphous (7631-86-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>(no bioaccumulation expected)</td>
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</tbody>
</table>

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**

Product/Packaging disposal recommendations: Landfill. 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**

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

14.1. **UN number**

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
**SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED**

**Safety Data Sheet**

<table>
<thead>
<tr>
<th>UN-No. (ADN)</th>
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</thead>
<tbody>
<tr>
<td>UN-No. (RID)</td>
<td>: Not applicable</td>
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</tbody>
</table>

**14.2. UN proper shipping name**

<table>
<thead>
<tr>
<th>Proper Shipping Name (ADR)</th>
<th>: Not applicable</th>
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</thead>
<tbody>
<tr>
<td>Proper Shipping Name (IMDG)</td>
<td>: Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (IATA)</td>
<td>: Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (ADN)</td>
<td>: Not applicable</td>
</tr>
<tr>
<td>Proper Shipping Name (RID)</td>
<td>: Not applicable</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>ADR</th>
<th>Transport hazard class(es) (ADR) : Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG</td>
<td>Transport hazard class(es) (IMDG) : Not applicable</td>
</tr>
<tr>
<td>IATA</td>
<td>Transport hazard class(es) (IATA) : Not applicable</td>
</tr>
<tr>
<td>ADN</td>
<td>Transport hazard class(es) (ADN) : Not applicable</td>
</tr>
<tr>
<td>RID</td>
<td>Transport hazard class(es) (RID) : Not applicable</td>
</tr>
</tbody>
</table>

**14.4. Packing group**

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

**14.5. Environmental hazards**

<table>
<thead>
<tr>
<th>Dangerous for the environment</th>
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</tr>
</thead>
<tbody>
<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

SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED is not on the REACH Candidate List

SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED is not on the REACH Annex XIV List
SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED
Safety Data Sheet

SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED 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
Reference to AwSV: Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 1429)
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: SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED is listed
SZW-lijst van mutagene stoffen: SILICON DIOXIDE, amorphous, HEXAMETHYLDISILAZANE TREATED is 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.

SDS EU (REACH Annex II) - Custom

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