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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product form</td>
<td>Substance</td>
</tr>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Substance name</td>
<td>SILICON CARBIDE, powder</td>
</tr>
<tr>
<td>Product code</td>
<td>SIS6959.0</td>
</tr>
<tr>
<td>Formula</td>
<td>CSi</td>
</tr>
<tr>
<td>Synonyms</td>
<td>SILICON CARBIDE, FIBROUS</td>
</tr>
<tr>
<td></td>
<td>SILICON CARBIDE WHISKERS</td>
</tr>
<tr>
<td>Chemical family</td>
<td>INORGANIC SILICON COMPOUND</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>Category</th>
<th>H Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>Category 1B</td>
<td>H350</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]**

**Hazard pictograms (CLP)**

- GHS08

**Signal word (CLP)**: Danger

**Hazard statements (CLP)**: H350 - May cause cancer.

**Precautionary statements (CLP)**: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Wear protective gloves/protective clothing/eye protection/face protection.
SILICON CARBIDE, powder
Safety Data Sheet

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Substance type : Mono-constituent
Name : SILICON CARBIDE, powder
CAS-No. : 409-21-2
EC-No. : 206-991-8

<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>Silicon carbide</td>
<td>(CAS-No.) 409-21-2 (EC-No.) 206-991-8</td>
<td>97 - 100</td>
<td>Carc. 1B, H350</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. 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 : May cause cancer.
Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
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
Suitable extinguishing media : Not combustible.
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture
Fire hazard : None known.

5.3. Advice for firefighters
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

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 product 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 : 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 particles to generate static charge may present a hazard when used in combination with flammable liquids.

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Provide local exhaust or general room ventilation to minimize exposure to dust.

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. Store locked up.

Incompatible materials : None known.

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>Country</th>
<th>Guideline/Standard</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>MAK</td>
<td>5 mg/m³</td>
<td>(fiber-free-respirable fraction)</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK Short time value</td>
<td>10 mg/m³</td>
<td>(fiber free-respirable fraction)</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value</td>
<td>10 mg/m³</td>
<td>0.1 fibers/cm³ (fibers including whiskers, alveolar fraction)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>OEL TWA</td>
<td>5 mg/m³ (dust, inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>VME</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>OEL TWA</td>
<td>10 mg/m³ (inhaled fraction)</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>Italy - Portugal</td>
<td>ACGIH TWA</td>
<td>10 mg/m³</td>
<td>(nonfibrous, inhalable fraction, particulate matter containing no asbestos and &lt;1% crystalline silica)</td>
</tr>
<tr>
<td>Latvia</td>
<td>OEL TWA</td>
<td>6 mg/m³</td>
<td></td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA)</td>
<td>10 mg/m³ (total dust)</td>
<td>5 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA)</td>
<td>15 mg/m³ (total dust)</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED</td>
<td>10 mg/m³ (no fibers-inhalable fraction)</td>
<td>3 mg/m³ (no fibers-respirable fraction)</td>
</tr>
<tr>
<td>Switzerland</td>
<td>MAK</td>
<td>3 mg/m³</td>
<td>(non fibrous-respirable dust)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA</td>
<td>10 mg/m³ (not whiskers-total inhalable)</td>
<td>4 mg/m³ (not whiskers-respirable)</td>
</tr>
</tbody>
</table>
Silicon Carbide (409-21-2)

### 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:**
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. 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:** 40.1 g/mol
- **Colour:** Bluish-black to gray.

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**Print date:** 10/04/2019

**EN (English)**

**SDS ID:** SIS6959.0
**Odour** : No data available  
**Odour threshold** : No data available  
**Refractive index** : 2.65  
**pH** : No data available  
**Relative evaporation rate (butylacetate=1)** : No data available  
**Melting point** : 2700 °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)** : Not combustible  
**Vapour pressure** : < 0.01 mm Hg @ 20°C  
**Relative vapour density at 20 °C** : No data available  
**Relative density** : 3.23  
**% Volatiles** : 100 %  
**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

<table>
<thead>
<tr>
<th><strong>SILICON CARBIDE, powder (409-21-2)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity information</strong></td>
<td>300 mg/kg TDLo: rat, ipr</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** : May cause cancer.  
Silicon carbide is a suspected carcinogen with experimental neoplastigenic data.

<table>
<thead>
<tr>
<th><strong>Silicon carbide (409-21-2)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IARC group</strong></td>
<td>2A - Probably carcinogenic to humans</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td>Not classified</td>
</tr>
</tbody>
</table>
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.
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

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: Landfill. 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. 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
SILICON CARBIDE, powder
Safety Data Sheet

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

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

### 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>Hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous for the environment</td>
<td>No</td>
</tr>
<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**
  - Not applicable

- **Transport by sea**
  - Not applicable

- **Air transport**
  - Not applicable

- **Inland waterway transport**
  - Not applicable

- **Rail transport**
  - Not applicable

### 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 CARBIDE, powder is not on the REACH Candidate List
SILICON CARBIDE, powder is not on the REACH Annex XIV List
SILICON CARBIDE, powder 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**

- **Reference to AwSV**
  - Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to VwVwS, Annex 3; ID No. 8277)
- **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 CARBIDE, powder is 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

<table>
<thead>
<tr>
<th>NiET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling</th>
<th>The substance is not listed</th>
</tr>
</thead>
</table>

### Denmark

**Danish National Regulations**

- Young people below the age of 18 years are not allowed to use the product
- Pregnant/breastfeeding women working with the product must not be in direct contact with the product
- The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 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: |
|---|---|
| Carc. 1B | Carcinogenicity, Category 1B |
| H350 | May cause cancer |

### 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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