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

1.1. Product identifier

| Product form | : | Substance |
| Physical state | : | Solid |
| Substance name | : | GLASS SPHERES, (SOLID BOROSILICATE) |
| Product code | : | SIG5210.0 |
| Chemical family | : | FIBER |

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 | : | Inorganic process chemical |

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

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Substance type | : | Mono-constituent |
| Name | : | GLASS SPHERES, (SOLID BOROSILICATE) |
| CAS-No. | : | 65997-17-3 |
| EC-No. | : | 266-046-0 |
GLASS SPHERES, (SOLID BOROSILICATE)
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<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>Glass oxide, borosilicate glass</td>
<td>(CAS-No.) 65997-17-3</td>
<td>95 - 100</td>
<td>Not classified</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. IF exposed or concerned: Get medical advice/attention.

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 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: The acute oral toxicity of this product has not been tested. A similar material was nontoxic to rats at 5,000 mg/kg.

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: Non-combustible. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture
No additional information available

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. 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

Precautions for safe handling: Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Provide local exhaust or general room ventilation to minimize exposure to dust. Spillage of this material may create a slippery condition for foot or vehicle traffic.

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: Strong oxidizing agents.
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>Glass oxide, borosilicate glass (65997-17-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></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:
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 dust and mist (teal cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Glass powder.</td>
</tr>
<tr>
<td>Colour</td>
<td>White.</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No additional information available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>~ 730 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non combustible</td>
</tr>
</tbody>
</table>
GLASS SPHERES, (SOLID BOROSILICATE)
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Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
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
Strong oxidizing agents.
10.6. Hazardous decomposition products
None known.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity: Not classified
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
This product contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Glass oxide, borosilicate glass (65997-17-3)

<table>
<thead>
<tr>
<th>IARC group</th>
<th>3 - Not classifiable</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>
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<tr>
<td>Symptoms/effects after inhalation</td>
<td>May cause irritation to the respiratory tract.</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>The acute oral toxicity of this product has not been tested. A similar material was nontoxic to rats at 5,000 mg/kg.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Waste materials</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewage</td>
<td>Do not dispose of waste into sewer.</td>
</tr>
<tr>
<td>Product/Packaging</td>
<td>Dispose in a safe manner in accordance with local/national regulations.</td>
</tr>
<tr>
<td>Ecology - waste</td>
<td>Avoid release to the environment.</td>
</tr>
</tbody>
</table>

### SECTION 14: Transport information

#### 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

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

### 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

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

### 14.5. Environmental hazards

Dangerous for the environment : No
GLASS SPHERES, (SOLID BOROSILICATE)
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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
GLASS SPHERES, (SOLID BOROSILICATE) is not on the REACH Candidate List
GLASS SPHERES, (SOLID BOROSILICATE) is not on the REACH Annex XIV List
GLASS SPHERES, (SOLID BOROSILICATE) 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
: GLASS SPHERES, (SOLID BOROSILICATE) is listed
SZW-lijst van mutagene stoffen
: GLASS SPHERES, (SOLID BOROSILICATE) is listed
NIET-geaccurdeerde lijst van voor de voortplanting giftige stoffen – Borstvoeding
: The substance is not listed
NIET-geaccurdeerde lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid
: The substance is not listed
NIET-geaccurdeerde 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: °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:
GLASS SPHERES, (SOLID BOROSILICATE)
Safety Data Sheet

| EUH210 | Safety data sheet available on request. |

SDS EU (REACH Annex II) - Custom

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