1 Identification of the substance / mixture and of the company

Product identifier
Trade name
Silica Gel orange

Relevant identified uses of the substance or mixture and uses advised against
Application of the substance / the mixture
Desiccant

Details of the supplier of the safety data sheet

Silica-gel-shop.nl
Slauerhofstraat 25
7552 ZW Hengelo
info@silica-gel-shop.nl
www.silica-gel-shop.nl

2 Hazards identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The substance is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
Not applicable.

Information pertaining to particular dangers for man and environment
This product is not subject to compulsory identification due to the calculation guide lines of the „General rating principles for preparations of the EC“ in its latest version.

Classification system
The classification was made according to the latest edition of substances lists of the EC, expanded upon from company and literature data.

Label elements
Labelling according to Regulation (EC) No 1272/2008
Not applicable.

Hazard pictograms
Not applicable

Signal word
Not applicable

Hazard-determining components of labelling
Not applicable.

Hazard statements
Not applicable

Precautionary statements
Not applicable

Other hazards
Results of PBT and vPvB assessment
PBT Not applicable.
vPvB Not applicable.
### 3 Composition/information on ingredients

**Chemical characterization**
- **Substance**: Silicon dioxide

**Description**
- Silicon dioxide

**Dangerous Components**

<table>
<thead>
<tr>
<th>CAS-No.: 7631-86-9</th>
<th>EG-No.: 231-545-4</th>
<th>Silicon dioxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>112926-00-8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional references**
- For the wording of the listed hazard warnings refer to section 16.

### 4 First aid measures

**Description of first aid measures**

**General information**
- No special measures necessary.

**After inhalation**
- Supply fresh air, seek medical treatment in case of complaints.

**After skin contact**
- Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

**After eye contact**
- Rinse opened eye for several minutes under running water. Get medical attention if any discomfort continues.

**After swallowing**
- Immediately rinse mouth and drink plenty of water. Get medical attention.

**Information for doctor**

- **Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.

### 5 Fire fighting measures

**Extinguishing media**

- **Suitable extinguishing media**
  - Fire extinguishing method of surrounding areas must be discussed.

- **Unsuitable extinguishing media**
  - None known

**Special hazards arising from the substance or mixture**

- **On burning the product might release**
  - Carbon monoxide, carbon dioxide

**Advice for fire fighters**

- **Protective equipment**
  - Wear self-contained breathing apparatus.
6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Avoid any dust formation.

Environmental precautions
Usual care recommended

Methods and material for containment and cleaning up
Pick up mechanically.

Reference to other sections
No dangerous substances are released.
See section 7 for safe handling information.
See section 8 for information about personal protective equipment.
See section 13 for disposal information.

7 Handling and storage

Handling
Precaution for safe handling
Store in cool and dry conditions, in properly closed containers.

Information about fire- and explosion protection
Measures against static discharges.

Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles
No special requirements.

Information about storage in one common storage facility
Not required.

Further information about storage conditions
Store in dry conditions.
Protect from humidity and water.
Product is hygroscopic.

Storage group
Storage group 13 – non-flammable material

Classification according to regulation for industrial safety (BetrSichV)
Not required

Specific end-use application
Desiccant

8 Exposure controls / personal protection

Control parameters
Ingredients with limit values that require monitoring at the workplace

<table>
<thead>
<tr>
<th>Silica dioxide</th>
<th>7631-86-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGW</td>
<td>4 mg/m³</td>
</tr>
</tbody>
</table>

Additional information
The lists valid during the making were used as basis.

Exposure Controls
Additional information about design of technical facilities
No further data.

(Continued on page 4)
### Personal protective equipment

(Continued from page 3)

**General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.

**Respiratory protection**
In case of dust respirator with breathing filter P2

**Protection of hands**
The glove material has to be impermeable and resistant to the product / the substance / the mixture.
Selection of glove material on consideration of the break through times, permeation rates and the degradation.

**The material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For permanent contact gloves made of the following materials are suitable
Nitrile rubber

**Eye protection**
Industry environment goggles have to be used.

### 9 Physical and chemical properties

Information on basic physical and chemical properties

#### General information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Granulate or beads orange</td>
</tr>
<tr>
<td>Form</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Undefined</td>
</tr>
<tr>
<td>Ph-value at 20°C</td>
<td>~4</td>
</tr>
</tbody>
</table>

#### Change in condition

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range</td>
<td>&gt; 1000 °C</td>
</tr>
<tr>
<td>Boiling point / Boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Inapplicable</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Inapplicable</td>
</tr>
<tr>
<td>Igniting temperature</td>
<td>Undefined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td></td>
</tr>
<tr>
<td>Self-igniting</td>
<td>Product is not self-igniting</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Inapplicable</td>
</tr>
<tr>
<td>Density</td>
<td>Undefined</td>
</tr>
<tr>
<td>Relative density</td>
<td>Undefined</td>
</tr>
</tbody>
</table>

(Continued on page 5)
10 Stability and reactivity

Reactivity

Chemical stability

**Thermal decomposition / conditions to be avoided**
No decomposition if used and stored according to specifications.

**Possibility of hazardous reactions**
No dangerous reactions known.

**Hazardous decomposition products**
The thermal decomposition is highly dependent on external conditions. It forms a complex mixture of liquids and gases in the air, including carbon monoxide, carbon dioxide and other organic components, if the material is burned degraded thermally or by oxidation.

11 Toxicological information

Information on toxicological effects

**Acute toxicity**

**Relevant for classification LD/LC50 values**

<table>
<thead>
<tr>
<th>Route</th>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>&gt;10000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>&gt;5000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalation</td>
<td>LC0/4 h</td>
<td>0,139 mg/l (rat)</td>
</tr>
</tbody>
</table>

**Primary irritant effect**
- on the skin: No irritating effect
- on the eyes: No irritating effect

**Sensitization**
No sensitizing effects known.

**Additional toxicological information**
This product is not subject to compulsory identification due to the calculation guide lines of the „General rating principles for preparations of the EC“ in its latest version. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
12 Ecological information

Toxicity

Aquatic toxicity

| Fish toxicity | LC50/96 h | >10000 mg/l (Brachydanionero) |
| Daphnia toxicity | EC50/24 h | >10000 mg/l |

Persistence and degradability

The product mostly can be eliminated from water by abiotic processes, like adsorption on activated sludge.

Behaviour in environment systems

Bio accumulative potential

Not accumulating in organisms.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Additional ecological information

General notes

Not hazardous for water (according to annex 1 VwVwS).

Other adverse effects

No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation

Disposal as non hazardous waste according to official regulations.

European Waste Classification for Statistics

Waste entry 06 08 99:

- Wastes from inorganic chemical processes
- Wastes from the manufacturing, formulation, supply and use of silicon and silicon derivatives
- Wastes not otherwise specified

The waste code numbers mentioned are recommendations based on the probable use of the product.

14 Transport information

Land transport ADR/RID and GGVSEB (cross-border/inland)

ADR/RID-GGVSEB class

No hazardous good.

Maritime transport IMDG/GGVSea

IMDG/GGVSea class

No hazardous good.

Marine pollutant

No

Air transport ICAO-TI and IATA-DGR

ICAO/IATA class

Not Restricted.

Additional information

Environmental risk

Not applicable.

(Continued on page 7)
Special precautions for the user
Not applicable.

Transport/Additional information
Not dangerous according to the above specifications.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Labelling according to Regulation (EC) No 1272/2008
The substance is not classified according to the CLP regulation.

Hazard pictograms
Not applicable.

Signal word
Not applicable.

Hazard-determining components of labelling
Not applicable.

Hazard statements
Not applicable.

Precautionary statements
Not applicable.

National rules

Classification according to regulation for industrial safety (BetrSichV)
Not required.

Water hazard class
Not hazardous for water (according to annex 1 VwVwS).

Chemical safety assessment
A chemical safety assessment is not performed.

16 Other information

This information is based on our knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation on Classification, Labelling and Packaging of Substances and Mixtures</td>
</tr>
<tr>
<td>EG-No</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA-DGR</td>
<td>Dangerous Goods Regulations by the &quot;International Air Transport Association&quot; (IATA)</td>
</tr>
<tr>
<td>IBC-Code</td>
<td>International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>ICAO-TI</td>
<td>Technical Instructions by the &quot;International Civil Aviation Organization&quot; (ICAO)</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>GGVSEB</td>
<td>Ordinance on the Transport of Dangerous Goods by Road, Rail and Inland Waterways</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Marine Pollution from Ships</td>
</tr>
<tr>
<td>PBT vPvB</td>
<td>persistent, bioaccumulative and toxic substances, very persistent, very bioaccumulative substances</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations Concerning the International Transport of Dangerous Goods by Rail</td>
</tr>
</tbody>
</table>

**General information**

Changes compared to the last version are marked as follows at the left side: (*). This version replaces all previous versions.