Note: The product is an object defined as an article in the Regulation (EC) No. 1907/2006 (REACH) Art. 3 Par. 3, not classified as dangerous or not containing substances classified as dangerous, so there is no obligation to issue a safety data sheet according to the Regulation (EC) No. 1907/2006 Art. 31 (Requirements for safety data sheets). The following information complies with the obligation according to Art. 32 (for substances on their own or in preparations for which a safety data sheet is not required), and was issued following the structure by Annex II.

1. Identification of the substance / the preparation / the product and identification of the company

1.1 Identification of the substance / the preparation / the product

Trade name: SiLiglit Glass-Glitter, Glass-Flakes, Glass-Nuggets

1.2 Application of the substance / the preparation / the product

To be used as: Decoration article
Unsubscribed use: unknown

1.3 Company identification

Manufacturer / Supplier: Sigmund Lindner GmbH
Oberwarmensteinacher Str. 38
95485 Warmensteinach / GERMANY
Phone: +49-9277-9940
Fax: +49-9277-99499
Web: www.sili.eu
E-Mail: reach@sigmund-lindner.com

Information provided by: Mr. Michael Dressler (Quality and Innovation)
Mr. Reinhold Schneider (Quality Assurance)

1.4 Emergency Call

Emergency information: Phone: +49-9277-9940
This telephone number can be reached during Office Hours (CET):
Monday - Thursday: 7.00 AM - 4.30 PM
Friday. 7.00 AM - 1.00 PM

2. Possible dangers

2.1 Classification of the substance or mixture
Not classified according to Regulation (EG) No. 1272/2008 (CLP).

2.2 Labelling elements
Not subject to labelling according to Regulation (EG) No. 1272/2008 (CLP).

2.3 Additional danger advice
No risks from this product regarding human health or environment are apparent. We therefore have no knowledge of chronic or skin irritating effects when physical contacts has occurred.
3. Composition / detailed information on the ingredients

3.1 Substance
Not relevant.

3.2 Mixtures
Description: Solid fragments of Soda-lime-glass, surface coloured

Colouring options:
- W Surface coloured (not resistant)
- WS Silver based + surface coloured (not resistant)
- L Surface coloured (solvent resistant coating)
- LS Silver based + surface coloured (solvent resistant coating)
- LA Aluminium based + surface coloured (solvent resistant coating)

3.3 Ingredients

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Classification</th>
<th>Weight</th>
<th>CAS No</th>
<th>EC No</th>
<th>REACH Reg.N°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide SiO₂</td>
<td>no hazardous substance</td>
<td>68.0-73.0 %</td>
<td>7631-86-9</td>
<td>231-545-4</td>
<td>01-2119379499-16</td>
</tr>
<tr>
<td>Sodium oxide Na₂O</td>
<td>WaterReact.2;H261 Skin Corr.1B;H314</td>
<td>7.5 - 13.0 %</td>
<td>1313-59-3</td>
<td>215-208-9</td>
<td>01-2120759517-43</td>
</tr>
<tr>
<td>Calcium oxide CaO</td>
<td>STOT.SE.3;H335 Skin.Irrit.2;H315 Eye Dam. 1,H318</td>
<td>4.0 - 9.5 %</td>
<td>1305-78-8</td>
<td>215-138-9</td>
<td>01-2120767286-44</td>
</tr>
<tr>
<td>Potassium oxide K₂O</td>
<td>self-rating: WaterReact.2;H261 Aquatic Acute 1, H400 Aquatic Chronic 1,H410</td>
<td>0.2 - 6.5 %</td>
<td>12136-45-7</td>
<td>235-227-6</td>
<td>01-2120109032-77</td>
</tr>
<tr>
<td>Magnesium oxide MgO</td>
<td>no hazardous substance</td>
<td>0.2 - 4.3 %</td>
<td>1309-48-4</td>
<td>215-171-9</td>
<td>no registration</td>
</tr>
<tr>
<td>Zinc oxide ZnO</td>
<td>Aquatic Acute 1, H400 Aquatic Chronic 1,H410</td>
<td>0.0 - 4.3 %</td>
<td>1314-13-2</td>
<td>215-222-5</td>
<td>01-2119463881-32</td>
</tr>
<tr>
<td>Aluminium trioxide Al₂O₃</td>
<td>no hazardous substance</td>
<td>0.5 - 3.9 %</td>
<td>1344-28-1</td>
<td>215-691-6</td>
<td>01-2119529248-35</td>
</tr>
<tr>
<td>Boric oxide B₂O₃</td>
<td>Eye.Irrit.2;H319 Skin.Irrit.2;H315</td>
<td>0.0 - 4.4 %</td>
<td>1303-86-2</td>
<td>215-125-8</td>
<td>01-2119486655-24</td>
</tr>
</tbody>
</table>
4. First-aid measures

4.1 Description of first aid measures

4.1.1 General Advice

4.1.2 After Inhalation of dust
Provide fresh air.

4.1.3 After Skin Contact
Clean skin with water and soap.

4.1.4 After Eye Contact
Remove particle carefully from the affected eye. If needed, remove contact lenses. Rinse eye 15 minutes thoroughly with plenty of water. Consult a physician if needed.
4.1.5 After Swallowing
Consult a physician after swallowing large quantities.

4.2 Main acute and delayed symptoms and effects
No information available.

4.3 Information on immediate medical help or special treatment
Dusty parts of the product may irritate skin, mucous membranes, eyes and respiratory tract. Decontamination and symptomatic treatments are in most cases sufficient.

5. Fire fighting actions

5.1 Extinguishing agents

5.1.1 Suitable extinguishing agents:
The product itself is neither combustible nor explosive. Extinguishing agents have to be coordinated with the surrounding fire.

5.1.2 For safety reason unsuitable extinguishing agents
Unknown.

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

5.3 Instructions for fire fighting
Protective equipment has to be coordinated with the surrounding fire.

6. Measures by accidental release

6.1 Personal precautions, protective equipment and emergency procedures
Avoid formation of dust, do not inhale dust.

6.2 Environmental measures
No special actions necessary.

6.3 Methods and materials for retention and cleaning
Sweep up the product and pick it up. Avoid dust formation during cleaning.

6.4 Reference to other sections
Personal protective equipment according to section 8.2, disposal according to section 13.

7. Handling and storage

7.1 Protective measures for safe handling

7.1.1 Notes on safe storage
Increased risk of slipping due to spilled product. Avoid dust formation.

7.1.2 Information on fire and explosion protection
No data available, the product itself is not flammable and not explosive.
7.2. Conditions for safe storage under consideration of incompatibilities

7.2.1 Requirements for storage in rooms and containers
No special storage necessary. Storage in tightly closed (original) container.

7.2.1 Information on storage in one common storage facility:
Storage class according to TRGS 510: LGK 13 (non-flammable solids)
No incompatible products to mention.

7.3 Specific end uses
See section 1.2.

8. Exposure limits and personal protection

8.1 Parameters to be monitored
Mechanical dry processing of the product can generate a risk of dust: The local limits of dust concentration at the work have to be considered.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>CAS-Number</th>
<th>EINECS</th>
<th>Value</th>
<th>Type of limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>General dust limit</td>
<td>----</td>
<td>----</td>
<td>10 mg/m³ E</td>
<td>Limit at work (AGW) according to the TRGS 900 Regulation</td>
</tr>
<tr>
<td></td>
<td>----</td>
<td></td>
<td>1.25 mg/m³ A</td>
<td></td>
</tr>
<tr>
<td>Aluminium</td>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>50 μg/g</td>
<td>Limit at work (BGW) according to the TRGS 903 Regulation</td>
</tr>
<tr>
<td>Silica, amorphous (Silicon dioxide)</td>
<td>7631-86-9</td>
<td>231-545-4</td>
<td>4 mg/m³ E</td>
<td>Limit at work (AGW) according to the TRGS 900 Regulation</td>
</tr>
</tbody>
</table>

8.2 Exposure controls and monitoring

8.2.1 Technical protection measures
An on-site extraction system is required in the event of gathered dust and thermal pollution from the product

8.2.2 Personal protection equipment

8.2.2.1 Respiratory protection
Use respiratory protection in case of dust exposure, e.g. dust mask with particle filter FFP2 or FFP3, according to standard NF EN 149.

Inhalation limitation of the zirconium compound of the Al2O3:
- 5 mg/m³ of Zr for 8 hours (TWA) according to ACGIH, DFG-MAK and OSHA
- 10 mg/m³ of Zr for 15 min (STEL) according to ACGIH and OSHA

Inhalation restriction from amorphous silica:
- 4 mg/m³ according to DFG-MAK
- 6 mg/m³ according to OSHA
- 10 mg/m³ for 8 hours (TWA) according to ACGIH

Under normal conditions of use, the load during processing of the product is lower than 1 mSv/year (1760 H/year) (limit values for persons prescribed by EURATOM Directive 96/29).
8.2.2.2 Hand protection
Protective gloves are generally not required. In case of constant skin contact, gloves are sufficient for low mechanical and material stress, see also BGR 195, e.g.:

<table>
<thead>
<tr>
<th>Material</th>
<th>Material thickness</th>
<th>Penetration time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylrubber</td>
<td>mind. 0.4 mm</td>
<td>mind. 30 min. acc. to DIN EN 374</td>
</tr>
</tbody>
</table>

8.2.2.3 Eye protection
Mechanical processing with dust exposure requires safety goggles closed at the side in accordance with DIN 58211 or DIN EN 166.

8.2.2.3 Body protection
Safety shoes to wear the product, as well as normal work clothes are sufficient..

8.2.2.4 General industrial safety and hygiene measures
Do not inhale dust. Avoid contact with eyes. Do not eat, drink or smoke while working. Wash hands before breaks and at the end of work..

8.2.3 Limitation and monitoring of environmental exposure
Environmentally hazardous properties of the product are not known, so that the general operational measures for environmental protection are sufficient..

8.2.4 Limitation and monitoring of the exposure for private end users
No special protective measures necessary as the product is not available for private end users.

8.2.5 Limitation and monitoring of environmental exposure
Environmentally hazardous properties of the product are not known, so that the general operational measures for environmental protection are sufficient.

9. Physical and chemical properties

9.1 General details
Physical condition: Solid
Shape: Irregular
Odour: Odourless
Colour: Various (refer to table regarding colour proportions, Chapter 3.3)

9.2 Important details regarding health / environmental protection as well as safety

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH value</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Heat resistance (colouring)</td>
<td>150 °C</td>
</tr>
<tr>
<td>Softening point (temperature)</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Self-ignition point (Solid/Gas)</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Blaze properties</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Risk of explosion</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Non-applicable</td>
</tr>
<tr>
<td>Specific weight</td>
<td>2.50 kg/dm³</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1.50 kg/dm³</td>
</tr>
</tbody>
</table>
Water solubility: Insoluble in water
Partition coefficient n-Octanol/ water: Non-applicable
Viscosity: Non-applicable
Vapour density: Non-applicable
Evaporation speed: Non-applicable

9.3 Additional details
There are no further details required regarding safety-relevant parameters.

10. Stability and reactivity

10.1 Reactivity
Not reactive under the stated conditions of use and storage.

10.2 Possibility of dangerous reactions
If handled and stored properly, no dangerous reactions are known.

10.3 Conditions to avoid
Protect from temperatures > 450 °C.

10.4 Incompatible materials
Strong alkalis (e.g. NaOH), hydrofluoric acid (HF).

10.5 Hazardous decomposition products
Unknown

11. Toxicological data

11.1 Information on toxicological effects

11.1.1 Toxicokinetics, metabolism and distribution
No data available.

11.1.2 Acute toxicity
No data available.

11.1.3 Etching and irritant effects
Product dust can mechanically irritate skin and mucous membrane, eyes and respiratory organs.

11.1.4 Sensitizing effects
No sensitizing effects on skin and respiratory organs known.

11.1.5 Specific organ toxicity at single or repeated exposure
No organtoxic effects known.

11.1.6 Carcinogenicity, mutagenicity and reproductive toxicity
No carcinogenic, mutagenic or toxic to reproduction effects known.
12. Environmental details

12.1 Toxicity
No data available.

12.2 Persistence and degradability
The product is insoluble and the inorganic substances it contains are not bioavailable.

12.3 Bioaccumulation potential
The product is insoluble and the inorganic substances it contains are not bioavailable, thus not bioaccumulative.

12.4 Mobility in the ground
The product is insoluble and therefore not mobile.

12.5 Results of PBT and vPvB assessment
The product does not contain PBT or vPvB substances according to REACH Annex XIII criteria.

12.6 Other adverse effects
Ozone depletion potential and greenhouse effect are not known.

Ecological and ecotoxicological data are not available. A threat to the environment is not to be expected if the product is handled and disposed of safely.

13. Notes on disposal

13.1 Waste treatment process
The product does not generate any waste that is subject to monitoring in accordance with Regulation (EU) No. 1357/2014. For disposal, national laws and local regulations must be observed.

13.1.1 Product
Product residues should be reused wherever possible.

13.1.2 Uncleaned packaging
Recommendation: Non-contaminated packaging can be reused. Cleaning agent Water.
14. Information on Transport

14.1 UN-Number
not relevant

14.2 Proper UN shipping name
not relevant

14.3 Transport hazard classes
not relevant

14.4 Packaging group
not relevant

14.5 Environmental hazards
see section 14

14.6 Special precautions for the user
see section 7

14.7 Transport in bulk in accordance with Annex II to the MARPOL Convention and the IBC Code
not relevant

Note: No dangerous goods as defined by ADR/RID/ADN/GGVSEB, ICAO/IATA, IMDG.

15. Legal provisions

15.1 Safety, health and environmental protection/legislation specific to the substance or mixture

15.1.1 EU-regulations
Classification and labelling: None according to Directive (EC) No. 1272/2008 (CLP) or other known EU regulations.

15.1.2 National regulations
Classification and labelling: None according to the Hazardous Substances Ordinance (GefStoffV) or according to other known national regulations

Employment restrictions: None according to GefStoffV, JArbSchG or MuSchV

Major Accidents Ordinance: The product is not subject to the Major Accidents Ordinance.

Water hazard class: No WGK, not hazardous to water according to AwSV.

15.2 Chemical safety assessment

A chemical safety assessment of the product or its components is not available.
16. Additional information

16.1 Summary of the H-Statements (section 3.2)

Rating of independent substances

H228  Flammable solid.
H261  In contact with water releases flammable gases.
H302  Harmful if swallowed.
H314  Causes severe skin burns and eye damage.
H315  Causes skin irritation.
H318  Causes serious eye damage.
H319  Causes serious eye irritation.
H335  May cause respiratory irritation.
H400/410 Very toxic to aquatic life / may cause long lasting harmful effects to aquatic life

16.2 Recommended Limitations of Use

Glass-Glitters, Glass-Flakes and Glass-Nuggets are not a toy and must therefore be stored away from children. A resale as toy requires the EC conformity evaluation and the distributor's compliance with the legal regulations. We expressly point out, that a conformity evaluation in this sense has not been carried out by us.

16.3 Further information

Company details: Sigmund Lindner GmbH
Oberwarmensteinacher Str. 38
95485 Warmensteinach / GERMANY
Phone: +49-9277-9940
Fax: +49-9277-99499
Web: www.sili.eu

Technical contacts:
Mr. Erwin Pschierer (Product Manager Glitter)
Mrs. Manuela Pilz (Product Manager Glitter)
16.4 Used abbreviations

A: Alveolar Dust
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
AGW: Occupational exposure limit according to TRGS 900
BGW: Biological limit value according to TRGS 903
CAS: Chemical Abstracts Service (division of the American Chemical Society)
CI N°: Colour Index Number
CLP: Classification, Labelling and Packaging of Substances and Mixtures
E: Inhalable Dust
EC N°: EINECS Number (European Inventory of Existing Commercial Chemical Substances)
FDA/CFR: Code of Federal Regulations - Title 21 - Food and Drugs
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
REACH: Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals.
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
TRGS: Technical Rules for Hazardous Substances
WGK: Water hazard class

16.5 Remarks

All details noted in this data sheet correspond to our knowledge at the time this data sheet has been put into effect. This information should be used as a guideline for a safe treatment in accordance with the products mentioned in our material safety data sheet, during storage, production, transport and disposal. This information is not applicable to other products, to newly produced materials, if the product mentioned in this material safety data sheet is mixed or blended with other articles or when other transformations are made to it.

Date of the current version: 2019-10-10
Replaced issue: MSDS en SiLiglit Glass-Glitter, Flakes, Nuggets coloured, V14/2018