

**Glass Beads**

**1. Identification of the substance / Preparation and Company:**

- 1.1 Identification of the substance or preparation:  
Commercial product name: Glass Beads
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
Relevant identified uses: Mineral blasting abrasive for industrial use
- 1.3 Details of the supplier of the safety data sheet  
Manufacturer/Supplier: SILADENT Dr. Böhme & Schöps GmbH  
Street / mailbox: Im Klei 26  
Country code. / postal code / city: DE - 38644 Goslar  
Phone: +49 (0) 53 21 / 37 79 - 0  
Fax: +49 (0) 53 21 / 38 96 32  
E-mail / Website: [info@siladent.de](mailto:info@siladent.de) / [www.siladent.de](http://www.siladent.de)  
Further information obtainable from: SILADENT Dr. Böhme & Schöps GmbH
- 1.4 Emergency telephone number  
SILADENT Dr. Böhme & Schöps GmbH: +49 (0) 53 21 / 37 79 - 0 (Mon-Fri. 8 a.m. – 4 p.m.)

**2. Hazards Identification:**

- 2.1 Classification: Not applicable.
- 2.2 Label elements: Does not require labelling under the CLP Regulation (EC) No. 1272/2008. But please take note of this product information. No risk of silicosis during application.
- 2.3 Safety instructions: Possible dust exposure due to fine dust particles.  
Other hazards: Not known.

**3. Composition / Information on Ingredients:**

- 3.1 Ingredients (mean value)
- |  |              |
|--|--------------|
| Silicon dioxide (SiO <sub>2</sub> )                | 70,00-75,00% |
| Sodium dioxide (Na <sub>2</sub> O):                | 12,00-15,00% |
| Calcium oxide (CaO):                               | 7,00-12,00%  |
| Magnesium oxide (MgO):                             | max. 5,00%   |
| Aluminium oxide (Al <sub>2</sub> O <sub>3</sub> ): | max. 2,50%   |
| Potassium dioxide (K <sub>2</sub> O):              | max. 1,50%   |

Chemical characterisation	EINECS	CAS No.	(1) REACH Registration No. (2) CLP Notification No.	Classification according to CLP Regulation (EC) No. 1272/ 2008	
				Hazard classes / Hazard categories	Hazard statements
Glass	266-046-0	68997-17-3	Not subject to REACH-Regulation	-/-	-/-

Hazardous substances: No dangerous ingredients.  
Substances with prescribed EC exposure values: Does not contain substances with EC exposure limits.

**4. First aid measures:**

- 4.1 General information: Consult a doctor in case of health disorders.
- After inhalation: Provide the affected person with fresh air. Consult a doctor in case of irritation of the respiratory tract.
- After eye contact: Remove contact lenses and rinse the eyes with open eyelids for 10 minutes under running water. If necessary, consult an ophthalmologist.
- After skin contact: Wash with water and rinse.
- After swallowing: Rinse mouth and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

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- 4.2 Most important symptoms and effects, both acute and delayed: Not known.
- 4.3 Indication of any immediate medical attention and special treatment needed: Treat systematically.

**5. Fire Fighting measures:**

- 5.1 Suitable extinguishing agents: Product does not burn. Match extinguishing measures to ambient situation.  
 Extinguishing media that must not be used: Not known.
- 5.2 Special hazards by the substance or the preparation itself, its combustion products or resulting gases: Not known.
- 5.3 Special protective equipment for fire-fighting: Match the firefighting measures to the environmental conditions.
- 5.4 Additional information: Not known.

**6. Accidental release measures:**

- 6.1 Personal precautions: Avoid dust formation. Round grains on the floor increases risk of slipping.
- 6.2 Environmental precautions: Not known.
- 6.3 Methods for cleaning: Collect mechanically and dispose of according to regulations.
- 6.4 Reference to other sections: Refer to protective measures in section 7 and 8.  
 Additional information: Not known.

**7. Handling and Storage:**

- 7.1 Handling:
  - Information for safe handling: Avoid dust formation.
  - Information about fire- and explosion protection: No special fire protection measures are necessary.
  - Additional information: None known.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Information on storage conditions: Always store product in dry conditions.
  - Requirements for storage rooms and containers: No special requirements needed.
  - Storage class VCI: LGK 13 (non-combustible solids)
- 7.3 Specific uses: Glass Beads are used for the manufacture of or use as blasting or grinding abrasives.

**8. Exposure controls / Personal protection:**

- 8.1 Control parameters
  - Occupational exposure limit values in the workplace and/ or biological limit values
  - Occupational Exposure Limits (OEL) in Germany for dusts
  - Inhalable dust: 10 mg/m<sup>3</sup>
  - Respirable dust: 1,25 mg/m<sup>3</sup>
  - Each with excess factor 2 according to TRGS 900 (German technical regulations for hazardous substances).
  - Community exposure limits: Country specific. Please inquire in individual cases.
- 8.2 Limitation and monitoring of exposure

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Appropriate engineering controls:	Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Provide adequate ventilation. This can be achieved by local suction or general air extraction. Glass Beads are not a hazardous substance, thus only the general dust limit value applies. Suitable assessment methods to verify the effectiveness of the protective measures taken include metrological and non-metrological determination methods as described in the Technical Rules for Hazardous Substances (TRGS) 4021 and BS EN 14042 "Workplace areas, Guidelines for the implementation and application of processes for assessment of exposure to chemical and biological agents".
Personal protective equipment:	The use of personal protective equipment is dependent on the concentrations and quantity of hazardous substances in their execution in specific workplaces.
Respiratory protection:	Normally, no personal respiratory protective equipment is necessary. In case of insufficient ventilation or exceeded workplace limits, a protective breathing mask should be worn (FFP filtering half mask depending on the existing concentration).
Hand protection:	Gloves.
Material of gloves:	Leather.
Eye protection:	Tight-sealing protective eye wear (dust-protection goggles) in accordance with EN 166:2001.
Body protection:	With normal use, no body protection by half or full-body coverall and boots is required.
Industrial hygiene measures:	Minimum standards for protective measures when handling working materials are listed in TRGS 500. Do not eat, drink, smoke or take drugs while using this product. Avoid contact with skin, eyes and clothing. Remove soiled or soaked clothing immediately. Wash hands before breaks and at end of work. Protect skin by using skin creams.
Environmental exposure controls:	See section 6 and 7; no further action is required.

**9. Physical and chemical properties:**

9.1 General information:	
Form:	round
Physical state:	solid
Colour:	white-transparent
Odour:	odourless
Safety data:	
Explosive properties:	The product itself is not explosive, however, the formation of explosive dust-air mixtures are possible.
Lower explosive limit:	None known.
Upper explosive limit:	None known.
Vapour pressure:	Not relevant.
Density:	Approx. 2,5 g/cm <sup>3</sup>
Expiry time:	Not relevant.
Solubility in water:	In-soluble in water.
pH value:	Not applicable.
Boiling point:	Not applicable.
Flashpoint:	Not determined, as the product is not flammable.
Melting point:	Approx. 730°C
Ignition temperature:	Not determined, as the product is not flammable.
The information on explosion limits refers to Glass Beads. Please refer to the technical data sheet for other physical and chemical data.	

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9.2 Other information: None.

**10. Stability and Reactivity:**

10.1 Reactivity: Glass Beads are non-reactive and do not change with proper handling and storage.

10.2 Chemical stability: Glass Beads are chemically stable and do not change with proper handling and storage.

10.3 Possibility of hazardous reactions: No hazardous reactions known.

10.4 Conditions to avoid: No decomposition if used according to specifications.

10.5 Incompatible materials: No hazardous reactions known.

10.6 Hazardous decomposition products: No known hazardous decomposition products.

**11. Toxicological Information:**

11.1 Information on toxicological effects: According to current IFA report the product contains no silicosis-including, toxic and carcinogenic components. The indications given in section 8 of this product information must be observed.

Acute toxicity: No data on the product available.

Irritation: No data on the product available.

Corrosivity: No data on the product available.

Sensitisation: No data on the product available.

Repeated dose toxicity: No known toxicity of Glass Beads.

CMR effects (carcinogenic, mutagenic and toxic to reproduction): No carcinogenic effect according to IFA report.

Summarised evaluation of the CMR properties: No known CMR properties.

Practical experience (relevant for classification and other observations): No data on the product available.

Carcinogenicity: No known carcinogenicity of Glass Beads.

Mutagenicity: No data on the product available.

Reproductive toxicity: No data on the product available.

Other information: Not known.

**12. Ecological Information:**

12.1 Toxicity: No known effects.

Ecotoxicity: For Glass Beads no environmental problems are to be expected when handled and used properly.

Fish toxicity: Harmful effects for aquatic organisms are not expected.

Aquatic invertebrates: Harmful effects for aquatic organisms are not expected.

Water plants: Harmful effects for aquatic organisms are not expected.

12.2 Persistence and degradability: Based on current experience, this product is inert.

12.3 Bioaccumulation potential: No data available. Accumulation in biological materials is rather unlikely.

12.4 Mobility in soil: Potential not known.

12.5 Results of PBT and vPvB assessment: Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.

12.6 Other harmful effects: Not known.

**13. Disposal Considerations:**

13.1 Waste treatment methods: Product: Glass Beads. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Confirm the exact waste code with the disposer.

Waste Code according to European Waste Catalogue (EWC): 12 0117 waste blasting material other than those mentioned in 12 0116.

Recommendation: Contact SILADENT Dr. Böhme & Schöps GmbH for the recycling of used Glass Beads - GP.

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13.2	Packaging: Contaminated packaging: Cleaned packaging:	National and local regulations must be followed. Packaging with Glass Beads residues can be recycled. Packaging can be reused after being cleaned or recycled.
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**14. Transport Information:**

14.1 Not considered hazardous goods in terms of these transport regulations.

**15. Regulatory Information:**

15.1	EU Regulations: National regulation: Water hazard class:  Technical Instructions on Air Quality Control (TA-Luft): Hazardous Incident Ordinance (12.BImSchV [German Federal Immission Control Ordinance ]): Solvents Ordinance (31.BimSchV [German Federal Immission Control Ordinance I]): Chemicals Prohibition Ordinance (CPO): Relevant technical regulations for hazardous substances: Employment Restrictions: Miscellaneous: International regulations:	Not known.  Not hazardous to water, classification according to VwVwS, Annex 4 Substances not mentioned by name. Substances not mentioned by name. Substances not mentioned by name. Substances not mentioned by name. Substances not mentioned by name. Contains no hazardous substances.  None known. Not subject to the VOC Regulation. All Glass Beads ingredients are listed with TSCA.
15.2	Chemical safety assessment:	Not relevant.

**16. Further Information:**

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

Further applicable EC directives:	None known.
Restrictions on use recommended by the manufacturer:	For industrial application only.
Other notices:	The product information in this documentation is correct to the best of our knowledge at the time of printing. The information is intended to provide you with advice on the safe handling of the product mentioned in this product information for storage, processing, transport and disposal. The information cannot be applied to other products. If the product mentioned in this documentation is in any way tampered with i.e. mixed with other materials, processed or undergoes processing, the information as supplied in this document no longer applies to the new product unless stated otherwise.

Changes since the last version Literature and data sources Regulations REACH Regulation (EC) No. 1907/2006 CLP Regulation (EC) No. 1272/2008 Hazardous Substances Ordinance (GefStoffN) Commission Decision 2000/532/EC (AW) Transport Regulations according to ADR, RIO and IATA TRGS 900 VOC Regulation (ChemVOCFarbV) Hazard statements, referred to in section 2 and 3 according 1D Regulation (EC) No. 1272/2008:	None
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The above information is based on the present state of knowledge; however, this shall not constitute a guarantee of product properties and establishes no contractual legal rights. Existing laws and regulations must be strictly followed by the recipient or user of the blasting medium on their own responsibility.

Legend

ADR	European agreement concerning the international carriage of dangerous goods by road
AW/EWC	European Waste Catalogue
BimSchV	Regulation on the Implementation of the (German) Federal Immission Control Ordinance
CAS	Chemical Abstracts Service
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association-Dangerous Goods Regulations
PBT	persistent, bioaccumulative, toxic
RID	Regulations concerning the International Carriage of Dangerous Goods
TRGS	Technical Rules for Hazardous Substances
TSCA	Toxic Substances Control Act
voc	Volatile Organic Compounds (VOCs)
vPvB	very persistent and very bioaccumulative
VwVwS	Administrative Regulation on Substances Hazardous to Water