Glass Beads

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

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 Bohme & Schops GmbH	Ultimate Dental Supply
Street / mailbox:	Im Klei 26	660A South Rd
Country code. / postal code / city:	D-38644 Goslar	Moorabbin Vic 3189
Phone:	Tel: +49 (0) 5321/ 3779 0	03 9532 1799
Fax:	Fax: +49 (0) 5321 / 3896 32	
E-mail / Website:	info@siladent.de www.siladent.de	info@ultimatedental.com.au
Further information obtainable from:	SILADENT Dr Bohme & Schops GmbH	

1.4 Emergency telephone number

SILADENT Dr. Böhme & Schöps GmbH: +49 (0) 5321 3779 Mon - Fri. 8am to 4pm

13 11 26 Poisons Hotline Australia
24 hours / 7 days

SECTION 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.

Safety instructions: Possible dust exposure due to fine dust particles.

2.3 Other hazards: Not known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures: This is a metastable glass structure.

Chemical characterisation	EINECS	CAS No.	(1) REACH Registration (2) CLP Notification No.	Classification according to CLP Regulation (EC) No, 1272/2008	
				Hazard classes / hazard categories	Hazard statements
Glas	266-046-0	65997-17-3	Not subject to REACH-Regulation.	-/-	-/-

	Ingredients (mean value)
Silicon dioxide (SiO_2)	70,00 - 75,00 %
Sodium dioxide (NA_2O):	12,00 - 15,00 %
Calcium oxide (CaO):	7,00 - 12,00 %
Magnesium oxide (MgO):	max. 5,00 %
Aluminium oxide (AL_2O_3):	max. 2,50 %
Potassium dioxide (K_2O):	max. 1,50 %

* not silicogenic resp. crystalline

Substances listed on the so called ‘Candidate List of Substances of Very High Concern (SVHC) for authorisation’ of the European Chemicals Agency (ECHA) are not intentional ingredients of this product. It is therefore not to be expected that those substances are present in quantities of > 0.1 % in the product.

Hazardous substances: No dangerous ingredients.

Substances with prescribed EC exposure values:	Does not contain substances with EC exposure limits.

SECTION 4: First aid measures

Please also take note of sections 8 and 16 of this product information.

4.1 Description of first aid measures

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.
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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Product does not burn. Match extinguishing measures to ambient situation.
Unsuitable extinguishing media:	Not known.
5.2 Special hazards arising from the product:	Not known.
5.3 Advice for fire fighters	Match the firefighting measures to the environmental conditions.
Additional information:	Not known.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Avoid dust formation. Round grains on the floor increases risk of slipping.
6.2 Environmental precautions:	Not known.
6.3 Methods and materials for containment and cleaning up:	Pick up mechanically and dispose of properly.
6.4 Reference to other sections:	Refer to protective measures in section 7 and 8.
Additional information:	Not known.

SECTION 7: Handling and storage

7.1 Precautions for safe handling	For safety reasons, it is recommended to use a protective sieve during filling.

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: Storage should take place in dry, ventilated rooms with a temperature as constant as possible. Avoid large temperature fluctuations, as they can lead to clumping. A storage period of 12 months should not be exceeded. Stack pallets max. 2 high.

Storage class VCI: LGK 13 (non-combustible solids)

7.3 Specific end uses: Mineral blasting abrasive for industrial use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values in the workplace and/ or biological limit values

Dust limits	CAS	MAK value mg/m³		Spzbg
		inhalable fraction (E)[1] mg/m³	respirable fraction (A)[1] mg/m3	
General dust limit	-	4	0,3	-

Community exposure limits: Country specific. Please inquire in individual cases.

8.2 Limitation and monitoring of exposure

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) 402 and BS EN 14042.

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 warn (FFP filtering half mask depending on the existing concentration).

Hand protection: Gloves material: 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	solid
Colour:	white-transparent
Odour:	odourless
Melting point / freezing point:	approx.730 °C / not usefully applicable
Boiling point or initial boiling point and boiling range:	not usefully applicable
Flammability:	not determined as product is not flammable
Lower and upper explosion limit:	Not known. The product itself is not explosive; however, formation of explosive air/dust mixtures is possible.
Flash point:	not determined as product is not flammable
Auto-ignition temperature:	not determined as product is not flammable
Decomposition temperature:	not determined, as product does not decompose
pH:	not usefully applicable
Kinematic viscosity	not usefully applicable
Solubility:	insouble in water
Partition coefficient n-octanol/water (kg value):	not usefully applicable
Vapour pressure:	not relevant
Density and/or relative density:	approx. 2.5 g/cm3
Relative vapour density:	not relevant
Particle characteristics:	not relevant

9.2 Other information: None.

SECTION 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.

SECTION 11: Toxicological information

11.1	**Information on hazard classes as defined in Regulation (EC) No 1"272/2008:**	Does not require labelling under the CLP Regulation (EC) No. 1272/2008. According to current DGUV 500 investigation report the product contains no silicosis-inducing, 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.
	Skin corrosion/irritation:	No data on the product available.
	Serious eye damage/irritation:	No data on the product available
	Respiratory or skin sensitisation:	No data on the product available
	Germ cell mutagenicity:	No data on the product available
	Carcinogenicity:	No known carcinogenicity of Glass beads.
	Reproductive toxicity:	No data on the product available
	STOT-single exposure:	No data on the product available
	STOT-repeated exposure:	No data on the product available
	Aspiration hazard:	No data on the product available
11.2	**Information on other hazards:**	None

SECTION 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	**Endocrine disrupting properties:**	The product does not contain substances in quantities of 0.1 % or more that have endocrine disrupting properties according to REACH Article 57 (f).
	Other harmful effects:	Not known.

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

SECTION 14: Transport information

14.1 UN number or ID number:	No dangerous
14.2 UN proper shipping name	
ADR/RID:	No dangerous goods
IMDG-Code / ICAO-TI / IATA-DGR:	No dangerous goods
14.3 Transport hazard class(es)	
ADR / RID / IMDG-Code / GGVSee / ICAO-TI / IATA-DGR:	No dangerous goods
14.4 Packing group:	No dangerous goods
14.5 Environmental hazards	
Label environmentally hazardous substances	
ADR / RID / IMDG-Code:	no
ICAO-TI / IATA-DGR:	
14.6 Special precautions for user**:**	see section 6 to 8
14.7 Transport in bulk according to IMO instruments:	Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the product

EU Regulations:	Glass Beads are not subject to the Regulation 722/2012/EU (ADI-Free).
National regulations	
Water hazard class:	Not hazardous to water, classification according to AwSV
Technical instructions on air quality (TA-Luft):	Substances not mentioned by name.
Hazardous Incident Ordinance (12.BImSchV [German Federal Immission Control Ordinance]):	Substances not mentioned by name.
Solvents Ordinance (31.BimSchV [German Federal Immission Control Ordinance I):	Substances not mentioned by name.
Chemicals Prohibition Ordinance:	Substances not mentioned by name.

Relevant Technical Regulations for Hazardous Substances:	Contains no hazardous substances.
Employment Restrictions:	None known.
Miscellaneous:	Glass beads are not subject to the VOC Regulation.
International regulations:	All Glass Beads ingredients are listed with TSCA, AICS, DSL/NDSL, KECL, PICCS, IECS, NZIoC, TCSCA and KKDIK.

15.2 Chemical safety assessment: Not relevant.

SECTION 16: Other information

Further applicable EC directives:	None known.
Restrictions on use recommended by the manufacturer:	For industrial application only.

Other information:
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	2018-07-17 Advice Protective sieve 2018-08-01 Regulation 722/2012/EU 2020-08-04 Supplement International Regulations, supplement AwSV
Literature and data sources **Regulations**	REACH Regulation (EC) No. 1907/2006 CLP Regulation (EC) No. 1272/2008 Hazardous Substances Ordinance (GefStoffV) Commission Decision 2000/532/EC (AVV) Transport Regulations according to ADR, RID and IATA TRGS 900 VOC Regulation (ChemVOCFarbV)
Hazard statements, referred to in section 2 and 3 according to Regulation (EC) No. 1272/2008:	None

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
AVV/EWC:	European Waste Catalogue
AwSV:	Administrative Regulation on Substances Hazardous to Water
BimSchV:	Regulation on the Implementation of the (German) Federal Immission Control Ordinance
CAS:	Chemical Abstracts Service
DGUV:	German statutory accident insurance
EC:	European Community
EN:	European Standard

GGVSee:	Dangerous Goods Ordilance Sea
IATA-DGR:	International Air Transport Association-Dangerous Goods Regulations
IBC-Code:	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI:	International Civil Aviation Organization-Technical Instructions
IMDG-Code:	International Maritime Code for Dangerous Goods
IMO:	International Maritime Organization
MAK:	Maximum workplace concentration
PBT:	persistent, bioaccumulative, toxic
RID:	Regulations concerning the International Carriage of Dangerous Goods
Spzbg	Peak Limitation Category (Exceedance Factor)
TRGS:	Technical Rules for Hazardous Substances
VOC:	Volatile Organic Compounds (VOCs)
vPvB:	very persistent and very bioaccumulative
TSCA:	Toxic Substances Control Act
AICS:	Australian Inventory of Chemical Subsances
DSL/NDSL:	Canada Domestic Substances List / Non-domestic Substances List
KECL:	Korea Existing Chemicals List
ENCS:	Japanese Existing and New Chemical Substances
PICCS:	Philippine Inventory of Chemicals and Chemical Substances
IECSC:	Existing chemical inventory in China
NZIoC:	New Zealand Inventory of Chemicals
TCSCA:	Toxic Chemical Substance Control Act in Taiwan
KKDIK:	Turkish Regulation on Chemicals Registration, Evaluation, Authorisation and Restriction