

SAFETY DATA SHEET

according to EC- directive 91/155/EC



Product Trade Name: Glass Beads (Metroblast)

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Version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier
Product Name Glass Beads Soda – line silicate glass without free silica.

Details of the supplier of the safety data sheet
Supplier Metrodent Limited
Lowergate Works, Lowergate
Paddock, Huddersfield
United Kingdom
+44 1484 461616
sales@metrodent.com

Emergency contacts
Office Hours Metrodent Limited
+44 1484 461616

Recommended intended purpose(s)
Dental

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients (Mean values)

Silicon dioxide* (SiO ₂)	70.00 – 75.00%
Sodium dioxide (Na ₂ O)	12.00 – 15.00%
Calcium oxide (CaO)	7.00 – 12.00%
Magnesium oxide (MgO)	Max. 5.00%
Aluminium oxide (Al ₂ O ₃)	Max. 2.50%
Potassium dioxide (K ₂ O)	Max. 1.50%

* not silicogenic resp. crystalline

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

Substance 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 for 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 limits
Does not contain substances with EC exposure limits.

3. HAZARDS IDENTIFICATION

Classification Not applicable
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.
Other hazards Not known

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4. FIRST AID MEASURES

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

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 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 water. Do not induce vomiting. If you feel unwell, seek medical advice.

Most important symptoms and effects, both acute and delayed - Not known

Indication of any immediate medical attention and special treatment needed - Treat symptomatically

5. FIRE-FIGHTING MEASURES

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

6. Accidental release measures

Personal precautions	Avoid dust formation. Round grain on the ground increases risk of slipping.
Environmental protection measures	Not known
Methods and materials for containment and cleaning up	Pick up mechanically and dispose of properly.
Reference to other sections	Refer to protective measures in sections 7 and 8.
Additional information	Not known

7. Handling and storage

Precautions for safe handling	Information on safe handling
Avoid dust formation	Information on fire and explosive protection. No special fire protection measures are necessary.
Additional information	Not known
Conditions for safe storage, including any incompatibilities	Information on storage conditions
Information on storage conditions	Always store product in dry conditions.
Requirement for storage rooms and containers	No special requirements needed.
Storage class VCI	LGK 13 (non-combustible solids)
Specific end uses	Glass Beads – GP are used for the manufacture of or use of blasting or grinding abrasives.

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8. Exposure controls/personal protection

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 – GP 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

Glove material: Leather

Eye protection

Tight-sealing protective eyewear (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 required.

Information on industrial hygiene

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 protective measures

See sections 6 and 7; no further action is required.

9. Physical and chemical properties

Appearance	round
Physical state	solid
Colour	white-transparent
Odour	odourless
Safety data	
Explosion hazard	The product itself is not explosive; however, formation of explosive air/dust mixtures is possible.
Lower explosion limit	not known
Upper explosion limit	not known
Vapour pressure	not relevant
Specific gravity	approx. 2.5g/cm ³
Flow time	not relevant
Water solubility	insoluble in water
pH value	not applicable
Boiling point/range	not applicable
Flash point	not determined as product is not flammable
Melting point	approx. 730°C
Ignition temperature	not determined as product is not flammable

The information about the explosion limits refers to Glass Beads – GP. Please refer to the technical data sheet for other physical and chemical data.

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10. Stability and reactivity

Reactivity	Glass Beads – GP are non-reactive and do not change with proper handling and storage.
Chemical stability	Glass Beads – GP are chemically stable and do not change with proper handling and storage.
Possibility of hazardous reactions	No hazardous reactions known.
Hazardous decomposition products	No known hazardous decomposition products.

11. Toxicological information

According to current IFA 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
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 – GP.
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 – GP.
Mutagenicity	No data on the product available
Reproductive toxicity	No data on the product available
Other information	Not known

12. Ecological information

Toxicity	No known effects
Ecotoxicity	For Glass Beads – GP 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.
Persistence and degradability	Based on current experience, this product is inert.
Bioaccumulation potential	No data available. Accumulation in biological materials is rather unlikely.
Mobility in soil	Potential not known
Results of PBT and vPvB assessment	Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.
Other harmful effects	Not known

13. Disposal considerations

Product	Glass Beads – GP. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Confirm the exact waste code with disposer.
Waste Code according to European Waste Catalogue (EWC)	12 01 17 waste blasting material other than those mentioned in 12 01 16
Packaging	National and local regulations must be followed.
Contaminated packaging	Packaging with Glass Beads – GP residues can be recycled.
Cleaned packaging	Packaging can be reused after being cleaned or recycled.

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14. Transport information

Glass Beads – GP are not dangerous goods.

15. Regulatory information

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

EU Regulations Not Known

National regulations

Water hazard class Not hazardous to water; classification according to VwVwS, Annex 4.

Technical instruction on air quality (TA-Luft)

Substances not mentioned by name.

Hazardous Incident Ordinance (12. BImSchV [German Federal Immission Control Ordinance])

Substance not mentioned by name.

Solvents Ordinance (31. BImSchV [German Federal Immission Control Ordinance])

Substances not mentioned by name.

Chemical Prohibition Ordinance

Substances not mentioned by name.

Relevant Technical Rules for Hazardous Substances

Contains no hazardous substances.

Employment Restrictions Not known

Miscellaneous

Glass Beads – GP are not subject to the VOC Regulation.

International Regulations All Glass Beads – GP ingredients are listed with TSCA.

Chemical safety assessment - Not relevant

16. Other information

Further applicable EC directives - Not 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

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 (ChemVOFarbV)

Hazard statements, referred to in section 2 and 3

According to 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
VwWwS	Administrative Regulation on Substance Hazardous to Water