

Safety Data Sheet Glass Bead and Glass Grit

Trade Names: Glass Bead and Glass Grit
Grades: Bead: BT3, BT4, BOL21, BOL23, BOL24, BOL25, BOL26, BOL27, BT13, BOL30
Grit: G1, G2, G3, G4
Original Issue Date: September 2003
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SECTION 1:

Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier: Soda Lime Glass Bead and Soda Lime Glass Grit
Product References: GB, GBMIL, GBAGB, GBR, MG, CG, RCG.
Product Description: Soda Lime Glass

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use: Blast cleaning media, Road Safety Marking

The substance does not meet the criteria for classification as dangerous according to EC1272/2008. Therefore exposure assessment, risk characterisation and exposure scenarios for the identified uses through the life cycle is not required (REACH Regulations 1907/006, Annex 1 and ECHA Guidance on information requirements and chemical safety assessment part A)

1.3 Details of supplier of the safety data sheet

Hodge Clemco Ltd, Orgreave Drive, Sheffield S13 9NR, U.K.

Email address of person: sales@hodgectlemco.co.uk

Emergency telephone number of the supplier

Telephone number: +44(0)114 254 8811
Hours of operation: Mon – Fri 08.30 – 1700

SECTION 2: Hazards Identification

2.1 Classification of substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (which supersedes Directive 67/548/EC(DSD))

Classification: Not classified. Glass bead and glass grit does not meet the criteria for classification in accordance with the regulations EC1272/2008. No special conditions are therefore needed. Risk management measures due to the potential occurrence of hazardous dusts during use as an abrasive/peening agent may be needed.

2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008 (which supersedes Directive 67/548/EC(DSD))

None

2.3 Other hazards

The substance does not meet the criteria for a PBT or vPvB substance

2.3.1 Dust. Use of this material may generate dust so risk management measures may be needed. Blasting operatives in a blast room should wear a CE marked or HSE approved blasting helmet. Ancillary workers should use a P2 dust respirator and safety goggles. Operatives in a blast room should wear a purpose-designed blasters' suit.

2.3.2 Fire – explosion. Particles liable to produce a fire hazard are the following:

Metal dust

Plastic dust

Dust produced when blasting metals coated with paint, rubber, etc.

SECTION 3: Composition/information on ingredients

There are no CAS or EC numbers for soda lime glass in its entirety. Numbers for the constituent parts/compounds are shown below.

| Substance | Chemical Formula | CAS No | EC No | Typical Content |
|-----------------------------|--------------------------------|-----------|-----------|-----------------|
| Silicon Dioxide (amorphous) | SiO ² | 7631-86-9 | 231-545-4 | 73.0% |
| Sodium Oxide | Na ² O | 1313-59-3 | 215-208-9 | 15.0% |
| Calcium Oxide | CaO | 1305-78-8 | 215-138-9 | 7.0% |
| Magnesium Oxide | MgO | 1309-48-4 | 215-171-9 | 4.0% |
| Aluminium Oxide | Al ² O ³ | 1344-28-1 | 215-691-6 | 1.0% |

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

The material is not considered hazardous in normal use but the following potential hazards should be recognised.

Inhalation: Remove to fresh air. Get medical attention if symptoms occur.

Skin: Substance is not a skin irritant and not a skin sensitiser. Wash with water and soap. Remove contaminated clothing and footwear, Get medical advice if

symptoms occur.
Eye: Substance is not an eye irritant. Use general measures if eye irritations occur. Do not rub eyes. Immediately wash with plenty of water. Check for and remove any contact lenses. If irritation persists, get medical attention.
Ingestion: No danger known, wash mouth out if appropriate. Do not induce vomiting. Give water to drink.
Advice to physician: No specific advice. Treat according to symptoms present.

4.2 Most important symptoms and effects, both acute and delayed.

The product may cause temporary mechanical irritation to the eyes, nose, throat and lungs.

4.3 Indication of any immediate medical attention and special treatment needed.

Notes for the doctor. Treat symptomatically.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

The product is non-combustible. Use an extinguishing agent appropriate to the surrounding materials.

In the event of Class A fires (packaging); ABC powder, water, foam
In the event of Class D fires (metal fire); powders, CO₂
Avoid scattering fine particles close to an ignition source.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: None

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid breathing dust. Use appropriate personal protective equipment.
Vacuum or brush spilled material from floor to reduce the risk of falls/slips.

6.2 Environmental precautions

Make sure spills can be contained. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and clean-up

Ventilate the area thoroughly. Vacuum or sweep up material and place in a suitable container for re-cycling or disposal.

6.4 References to other sections

Section 1 for emergency contact information
Section 8 for information on personal protective equipment
Section 13 for Waste Disposal

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Glass bead and glass grit are not classified and no protective measures are needed for safe handling. Prevent formation of dust. Use only in well ventilated areas. Wear personal protective clothing. Wash hands and face before breaks and after work.

7.2 Conditions for safe storage including any incompatibilities

Keep dry. No other special requirements.

7.3 Specific end uses

Abrasive blast cleaning may fracture the product and generate dust. Ventilate work area in vicinity of operator.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters of relevance to industrial settings (occurrence of dusts, mists and fumes)

The user must know the exact nature of the dust produced during the industrial process for which the abrasive is used, and must take the necessary measures to protect his workers. A qualitative analysis is necessary for blasted parts that may contain any substance with an exposure limit. The concentrations of the substances contained in the abrasives that are subject to exposure limits (in particular average exposure limits under the relevant receiving country's environmental regulations).

8.2 Exposure controls for industrial settings

8.2.1. Appropriate Engineering Controls

Use process enclosures, local exhaust ventilation or other engineering controls to keep exposure to below any recommended or statutory limits. For storage and handling, general ventilation is adequate.

8.2.2 Personal Protective Equipment

Blasting operatives in a blast room should wear a CE marked or HSE approved blasting helmet. Ancillary workers should use a P2 dust respirator and safety goggles. Operatives should always wear appropriate gauntlets.

Operatives using the product in a blast room should wear heavy-duty coveralls or a purpose designed blasters' suit. Heavy duty boots with toe protection should be worn.

Occupational Exposure Limits

All dusts have been assigned exposure limits, however in EH40/2005 and 2007 there are no defined parameters for glass dusts. Glass, because of its inert nature, does not have a WEL and

is classified as a general dust.

The following statement applies to glass bead based product dusts;

The absence of a WEL does not imply that a substance is safe. Exposure to these substances should be controlled to a level to which nearly all of the working population could be exposed to on a daily basis without adverse effects on their health. Under Reg 6 of COSHH, employers should determine their own in-house standards for control based on published information.

Regulation 11 (2b) requires that health surveillance shall be treated as appropriate where:

The exposure of the employee to a substance hazardous to health is such that an identifiable disease or adverse health effect may be related to that exposure, there is a reasonable likelihood that the disease or effect may occur under the particular conditions of his work and there are valid techniques for detecting indications of the disease or effect.

General dusts have been assigned a WEL of 10mg/m³ in EH40/2005, as a total inhalable dust (total inhalable dust being defined as the fraction which enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract).and 5mg/m³ of respirable dust.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--------------------------------------|--|
| Appearance: | Bead – solid spherical particles, Grit - solid, angular particles |
| Colour; | White |
| Odour | None |
| Odour threshold: | Not applicable |
| Flash Point: | Nil |
| Melting point: | >800°C |
| Relative Density (ref water at 20°C) | 2.45 – 2.55 kgs/dm ³ |
| Bulk density: | 1.5 kgs/dm ³ |
| Solubility: | Insoluble in water |
| Explosive properties: | Non explosive |
| Hardness: | 6 Moh |

9.2 Other information

Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Not applicable. See Section 9.

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Avoid contact with hydrofluoric acid

10.5 Incompatible materials

Water

10.6 Hazardous decomposition products

The material does not decompose.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Known severe toxicity: None
Known local effects: None

SECTION 12 Ecological information

Handled correctly these products pose no serious environmental hazard. Hodge Clemco Ltd have not conducted any environmental studies on these products, and no information has been found in a search of literature. These products do not contain any substances that are classified under EC legislation for environmental effects.

SECTION 13: Disposal considerations

The abrasive must be disposed of in accordance with national legislation (See Section 16) and local regulations. The material as supplied is classed as a non-hazardous inert solid waste. Spent abrasive used as a blasting medium must be disposed of under classification 12 01 16 (waste blasting material containing dangerous substances) or 12 01 17 (waste blasting material other than those mentioned in 12 01 16). The waste producer must determine if hazardous substances in the coating being removed are likely to cause the waste to be hazardous.

SECTION 14: Transport information

International regulations (ADR, IMDG, OACI): not concerned
Transport outside storage areas: protect against moisture
Weight: for pallets and drums: 750-1500 kg
For big bags: 1000, 1500 or 2000 kg.

SECTION 15: Regulatory Information

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

- The product known as glass bead or glass grit is subject to national and European laws in effect.
- According to existing European Regulations No 1999/45/CE and No 67/548/CEE, glass bead and glass grit are not considered as dangerous preparations.

- According to European Regulation No 1907/2006/CE (REACH), glass abrasives are considered as articles.

SECTION 16: Other information

The information contained in this file is based on our level of knowledge to date. Consequently, any person or organisation wishing to make any comments should inform us. Moreover, the information provided is not exhaustive. The user must therefore be fully acquainted. We would also like to point out that Hodge Clemco Ltd provides training courses for users. Please consult the website www.hodgeclemco.co.uk for further information.