



## Abrasives, Electro Minerals & Metals

### MATERIAL SAFETY DATA SHEET

**Brand Name(s):** *Beadomac, MILBead* AGB Series, *MILBead, Beadomac* Road, *Beadomac* Mix, *Beadomac* Crush, *Beadomac* Crush Recycled & *MacGlass*

**Mac'Ants Group Ref:**

**GB, GBMIL, GB AGB, GBR, MG, CG, RCG**

**Product:** Soda Lime Glass Bead Based Products

#### 1. Identification of the Substances/Preparation & Company

**Preparation:** The products this data pertain to is as above & relate to ; Glass Beads & Grit Blends

**Company:** Mac'Ants Abrasives Limited t/a Mac'Ants Group  
Todwick Road  
Dinnington  
Sheffield, South Yorkshire  
S25 3SE

**Emergency Telephone:** +44 (0) 1909 552500

#### 2. Composition/Information on Ingredients

##### 2.1 Chemical Description

Product Ref	Chemical Description
GB, GBMIL, GB AGB, GBR	Soda Lime Glass Beads
CG, MG, RCG	Soda Lime Glass Grits and Blends


##### 2.2 Typical Compositions

Compound	Chemical Formula	Typical Content %	CAS No. / EINECS No.
Silicon Dioxide (amorphous)	SiO <sub>2</sub>	73.0	7631-86-9 / 231-545-4
Sodium Oxide	Na <sub>2</sub> O	15	1313-59-3 / 215-208-9
Calcium Oxide	CaO	7	1305-78-8 / 215-138-9
Magnesium Oxide	MgO	4	1309-48-4 / 215-171-9
Aluminium Oxide	Al <sub>2</sub> O <sub>3</sub>	1	1344-28-1 / 215-691-6

N.B. Please note that the CAS numbers noted above are for the constituent parts/compounds of the materials, there is not a specific / generic CAS / EINECS number for Glass in its entirety.

#### 3. Hazard Identification.

**Mac'Ants Group**, Todwick Road, Dinnington, Sheffield S25 3SE UK  
Tel: +44 (0) 1909 552500 Fax: +44 (0) 1909 568726  
Email: [group@macants.co.uk](mailto:group@macants.co.uk) [www.macants.co.uk](http://www.macants.co.uk)



**Human Health Effects:** The material is not considered hazardous in normal use but the following potential hazards should be recognised;

- (a) Dust - Inhalation. (See below)
- (b) Skin irritation in susceptible individuals.
- (c) Noxious fumes evolved during fire.
- (d) Risk of dust explosion.

**Environmental Effects:** On the basis of information available, these products are not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

#### 4. First Aid Measures

**Skin Contact:** Wash with plenty of water or soap and water. If irritation persists or any sign of tissue damage is apparent, obtain medical advice immediately. As with any industrial product, contact with skin can cause irritation leading in some cases to dermatitis (Reference 7.1) and it is wise to take the usual precautionary measures of obtaining medical clearance for employees who have a history of skin disease or allergy. Skin contact should therefore be avoided as much as emollient such as white petroleum jelly (Vaseline) is useful to minimise dryness of the skin.

**Eye Contact:** Irrigate with copious quantities of water for at least ten minutes and obtain medical advice if irritation persists or if there is any tissue damage.

**Inhalation:** In the event of exposure to levels above those stated above, evacuate individuals concerned to a dust free environment, preferably into fresh air - if respiratory difficulties are encountered seek medical advice immediately. We recommend the use of approved dust masks or where abrasive blasting operations are conducted then appropriate extraction plant should be utilised or approved breathing apparatus or ventilation air changes of 75 times per hour (min).

**Ingestion:** The material should not be ingested and for this reason the preparation and consumption of food and drink in working areas should not be allowed. Rinse mouth with water and obtain medical advice immediately where accidentally ingested.

#### 5. Fire Fighting Measures

**Extinguishing Media:** Any available.

**Exposure Hazards:** This product will not ignite unless suspended as dust in sufficient concentration in air. In which case for decomposition refer to section 10.

**Protective Equipment:** Fire fighters & others exposed, wear self-contained breathing apparatus and be aware of other combustible substances involved in any fire.

#### 6. Accidental Release Measures

**Personal Precautions:** Avoid dust inhalation, observe occupational exposure limits detailed in section 8.

S22 - Do Not Breathe Dust

S25 - Avoid Contact with Eyes

S38 – In event of insufficient ventilation, wear suitable respiratory equipment

S52 – Use only well ventilated areas

**Environmental Precautions:** Do not allow to enter drains & water courses, product in bead format is very slippery on surfaces; Exercise CAUTION.

**Methods of Cleaning Up:** Vacuum or sweep up, for disposal see section 13.

## 7. Handling & Storage

**Handling:** Handle in normal manner and be mindful of manual handling methods (weights), keep dust formation to a minimum.

S22 - Do Not Breathe Dust

S25 - Avoid Contact with Eyes

S38 – In event of insufficient ventilation, wear suitable respiratory equipment

S52 – Use only well ventilated areas

**Storage:** Store in closed bags / containers in dry well ventilated areas.

## 8. Exposure Controls/Personal Protection

**Engineering Measure:** In a blast cabinet with dust collectors or a closed circuit blast cleaning system are preferred methods of use. If a blast room is used it must have a dust extraction system to keep dust levels below the occupational exposure limits. Ventilation of cabinets and rooms should be 75 air changes per hour.

For use in slip resistant products, bonded & coated abrasives & other applications where product is added, poured or applied the occupational exposure limits for the given product must be adhered to.

### **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 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 controlled 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 10 mg/m<sup>3</sup> 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).*

**Respiratory & Eye Protection:** In blasting environments if a blast room is used , an air fed blast helmet with built in visor to EN146 must be used. For applied, poured and added applications wear approved dust mask and eye protection.

**Skin & Hand Protection:** Prolonged contact with the skin should be avoided and protective clothing such as overalls and PVC or cotton-chrome gloves should always be available. Face masks should be worn when dust is likely to be created.

**Ear Protection:** Wear hearing protection when blasting and in other applications abide by noise regulations dictated by employer.

9. **Physical / Chemical Properties**

Product Ref	Appearance	Odour	Decomposition Point	Insoluble in
GB, GBMIL, GB AGB, GBR	Clear , colourless spheres	None	>800 °C	Water
CG, RCG, MG	Clear / White / Multi Colour grains	None	>800 °C	Water

10. **Stability & Reactivity**

**Conditions to avoid:** Excessive thermal exposure to decomposition points.

**Hazardous Decomposition:** None, products change from solids to liquids with no adverse decomposition.

**Products:** None.

11. **Toxicological Information**

**Laboratory Data:** These materials have not been tested for toxicity, they are not classified under EC Directives.

**Human Data:** There is no human data available, glass and its derivatives has been utilised extensively for centuries and its human exposure scenario is well documented in peer literature.

12. **Ecological Information**

**Assessment:** Handled correctly these products pose no serious environmental hazard.

**Test Results:** Mac'Ants Group 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.

13. **Disposal Considerations**

In accordance with the Environmental Protection Act (Duty of Care) Regulations 1991. In use as a blast media the product is likely to become mixed with the stripped coating and or some substrate. These need to be taken into account during disposal. Similarly the inclusion of these products in

applied, poured and bound products/applications the binding materials / materials worn against them must be borne in mind and their disposal implications taken into consideration.

#### 14. Transport Information

**14.1 Land Transport (ADR/RID)** Not classified according to Transport Regulations for Hazardous / Dangerous Goods.

**14.2 Marine Transport (IMO/IMDG)** Not classified according to Transport Regulations for Hazardous / Dangerous Goods.

**14.3 Air Transport (IATA)** Not classified according to Transport Regulations for Hazardous / Dangerous Goods.

#### 15. Regulatory Information

**15.1 Classification** This product range is not hazardous according to Directive 67/548/CE, 199/45/CE and 1272/2008/CE.

**15.2 Labelling Requirement** Not subject to labelling in accordance with current regulations in force as detailed at 15.1.

**15.3 REACH Regulation** Glass beads and glass grits have been assessed as exempt from registration under REACH regulation for a number of justifications, full details are available on request of via our website [www.macants.co.uk/reach\\_regs.htm](http://www.macants.co.uk/reach_regs.htm).

#### 16. Other Information

**Use:** These products are used as blast medias, slip resistant materials, abrasive aggregates, peening medias, reflective media. If they are used for any other purpose, the advice of Mac'Ants Group should be sought regarding any additional hazards that may arise.

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