

Uniclass L621	EPIC F2112	Apr 12
CI/SfB	Eq2	



## SAFETY INFORMATION SHEET – REGEN (GROUND GRANULATED BLASTFURNACE SLAG)

### 0. FOREWORD

Granulated Blastfurnace Slag is registered as a substance under the REACH Regulation (EC 1907/2006). Its REACH Registration number is 01-2119487456-25.

This Safety Information Sheet provides information about the substance to enable appropriate risk management measures to be identified and applied.

Because Granulated Blastfurnace Slag does not meet the requirements for classification as dangerous under the EU Dangerous Substances (67/548/EEC) Directive or the Classification, Labelling and Packaging of substances and mixtures (CLP) regulations (EC1272/2008), there is no requirement to provide a Safety Data Sheet in accordance with Article 31 of REACH. No authorisation is required under Title VII of REACH and no restriction is imposed under Title VIII of REACH.

### 1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

#### 1.1 Identification of the Substance

Ground Granulated Blastfurnace Slag (GGBS)  
Registered Trade Mark: 'Regen'  
REACH Registration number: 01-2119487456-25  
CAS number: 65996-69-2  
EINECS number: 266-002-0

#### 1.2 Use of the Substance

Used as a cementitious component in e.g. concrete, mortar and grout.

#### 1.3 Company

Civil and Marine Limited  
Trading as 'Hanson Cement'  
Hanson House  
14 Castle Hill  
Maidenhead  
SL6 4JJ

Tel: +44 (0)845 722 7853

Email: cement.technical.help@hanson.biz

#### 1.4 Emergency Telephone

+44 (0)845 722 7853 (Office hours only)

### 2. HAZARDS IDENTIFICATION

GGBS is a fine powder, which can cause mechanical irritation to the eyes and respiration system. When mixed with water, the resultant liquid will gradually become alkaline with a pH up to 12. GGBS may be hot when delivered in bulk.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

GGBS consists principally of the oxides of calcium, silicon, aluminium and magnesium with low solubility in water giving a weak alkaline solution. The fineness is approximately 500m<sup>2</sup>/kg.

### 4. FIRST-AID MEASURES

#### 4.1 Eye Contact

Rinse the eyes with water with the eyelids open.  
Seek medical advice if irritation persists.

#### 4.2 Skin Contact

Wash with soap and water.

#### 4.3 Ingestion

Rinse mouth and drink plenty of water.

#### 4.4 Inhalation

Move affected person into fresh air.  
Seek medical advice if irritation persists.

### 5. FIRE-FIGHTING MEASURES

GGBS is not flammable and will not facilitate combustion with other materials.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal Precautions

Refer to Section 8.

#### 6.2 Cleaning Up

If possible, recover the spillage in a dry state by vacuuming, to minimise generation of airborne dust. The product can be slurried by the addition of water.

### 7. HANDLING AND STORAGE

#### 7.1 Handling

Refer to Sections 2 and 8. Bags may have a small amount of GGBS on the outer surface and appropriate personal protective clothing should therefore be used.

#### 7.2 Storage

Bulk GGBS should be stored in air-tight silos.

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## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

### 8.1 Exposure Limit Values

GGBS is not currently listed in the table of Workplace Exposure Limits (WELs), approved by the UK Health and Safety Commission. On the basis of the WELs for similar materials (e.g. Portland cement and calcium silicate), Civil and Marine Limited recommend applying a WEL of 10mg/m<sup>3</sup> total inhalable dust, 4mg/m<sup>3</sup> respirable dust. (as 8hr Time Weighted Average). See HSE Guidance Note EH40 for further information.

### 8.2 Exposure Controls

#### 8.2.1(a) Respiratory Protection

Where practicable, dust exposure should be controlled by engineering methods. Otherwise, suitable respiratory protection should be worn to ensure that personal exposure is less than the WEL.

#### 8.2.1(b) Hand Protection

Waterproof gloves should be worn, particularly when handling any GGBS/water mixture, e.g. concrete or mortar.

#### 8.2.1(c) Eye Protection

Dust-proof goggles should be worn wherever there is a risk of GGBS powder or any GGBS/water mixture entering the eye.

#### 8.2.1(d) Skin Protection

Protective clothing should be worn which ensures that GGBS or any GGBS/water mixture e.g. concrete or mortar, does not come into contact with the skin. In some circumstances such as when laying concrete, waterproof trousers and Wellingtons may be necessary. Particular care should be taken to ensure that wet concrete does not enter the boots and persons do not kneel on the wet concrete so as to bring the wet concrete into contact with unprotected skin. Should wet mortar or wet concrete get inside boots, gloves or other protective clothing then this should be immediately removed and the skin thoroughly washed as well as the protective clothing/footwear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: off-white powder with a particle size generally less than 30 micron.

Odour: may have a mildly sulphurous odour.

pH of wet GGBS: 10 to 12.

Melting point: > 1,000°C Flash point: non flammable.

Flammability: non flammable.

Explosive properties: none.

Oxidising properties: none.

Water solubility: slight <100 mg/L.

Contains less than 1% crystalline silica.

Contains less than 1ppm water-soluble chromium VI.

## 10. STABILITY AND REACTIVITY

GGBS is low-reactivity, chemically stable and does not produce hazardous decomposition products.

## 11. TOXICOLOGICAL INFORMATION

The substance is not classified as dangerous. Details of the toxicological tests submitted as part of the REACH dossier for this substance are available on the European Chemicals Agency website.

## 12. ECOLOGICAL INFORMATION

In large quantities, the addition of GGBS to water will cause the pH to rise and may reduce oxygen availability, which might be toxic to aquatic life in some circumstances.

## 13. DISPOSAL CONSIDERATIONS

Dispose of empty bags or discarded GGBS to a place authorised to accept Builder's waste.

## 14. TRANSPORT INFORMATION

GGBS is not covered by the international regulations on the transport of dangerous goods (IMDG, ADR/RID) and no classification is required.

### For further information please contact:

Hanson Cement  
Ketton  
Stamford  
Lincolnshire  
PE9 3SX

### Technical Helpline:

Tel: 0845 722 7853  
(calls charged at local rate)

Fax: 01780 727154

Email: cement.technical.help@hanson.biz

### Customer Services:

Tel: 0845 600 1616  
(calls charged at local rate)

Fax: 01780 727008

Email: cement.customer.services@hanson.biz