SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier
Product name: GLASSBOND SAUEREISEN LOW EXPANSION CEMENT N°29
REACH notes: Mixture- Substances contained in this product that are not classified as hazardous have been/will be registered for REACH at the appropriate time.

1.2 Relevant identified uses of the mixture and uses advised against.
Identified use: High temperature adhesive and sealant
Uses advised against: No other uses

1.3 Details of the supplier of the safety data sheet
Company identification: Glassbond (NW) Ltd
West Side Industrial Estate
Jackson Street
St. Helens
Merseyside WA9 3AT
United Kingdom
Telephone: +44(0)1744 730334
Fax: +44(0)1744 451661
Email: technical@glassbond.co.uk

1.4 Emergency telephone number: +44(0)1744 730334
(GMT, English spoken, Mon-Friday; 08.30-16.30)

SECTION 2: HAZARDS IDENTIFICATION*

2.1 Classification of the mixture: calculation method
2.1.1 Regulation (EC) No. 1272/2008(CLP)
Physical/Chemical: NOT CLASSIFIED
Human health: Acute toxicity 4 (oral, skin inhalation)
Environmental: NOT CLASSIFIED

2.1.2 Directive 1999/45/EC(DPD) Not available

2.2 Label elements According to Regulation (EC) No. 1272/2008(CLP)
Acute toxicity Oral 4
Acute toxicity Skin 4
Acute toxicity Inhalation 4
GHS07

Date Revised : 31.10.2018
Revision : 17
Product : LOW EXPANSION CEMENT N°29

<table>
<thead>
<tr>
<th>SIGNAL WORD (s)</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD</td>
<td></td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>STATEMENT(s)</td>
<td></td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRECAUTIONARY STATEMENT(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P261</td>
<td>Avoid breathing dust</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves /protective clothing/eye protection/face protection</td>
</tr>
<tr>
<td>P312</td>
<td>Immediately call a POISON CENTRE or doctor if you feel unwell</td>
</tr>
</tbody>
</table>

2.3 Other Hazards

PBT : This mixture contains no substances considered as PBT

vPvB: This mixture contains no substances considered as vPvB

2.4 Additional information

For full text of H/P phrases see section 16 if not written out in full above.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS*

3.1 Substances. (This product is a mixture according to EU legislation.)

3.2 Mixture of inorganic powders

<table>
<thead>
<tr>
<th>Hazardous Ingredient</th>
<th>% w/w</th>
<th>CAS N°</th>
<th>EC N°</th>
<th>REACH N°</th>
<th>CPL EC 1272/2008</th>
</tr>
</thead>
</table>

3.3 Additional information

For full text of H/P phrases see section 16 if not written out in full above.
SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Take off contaminated clothing and wash before re-use (P362).
Take care not to contaminate unaffected areas.

Inhalation
IF INHALED remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)

Eyes
IF IN EYES rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)
If eye irritation persists: Get medical attention (P337+P313)

Skin
Wash hands thoroughly after handling (P264)
If skin irritation or rash occurs get medical attention (P333+P313)

Ingestion
IF SWALLOWED: Rinse mouth (P330). Call a POISON CENTRE or doctor if you feel unwell (P301+P312). Show this safety data sheet.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Eye contact- May cause temporary eye irritation.

Risks
No information available

4.3 Indication of any immediate medical attention and special treatment needed

Treatment
Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Suitable: CO2 or dry chemical spray, water spray may help to reduce the temperature and extinguish flames for surrounding materials.
Unsuitable: High pressure water jet.

5.2 Special hazards arising from the mixture

The powder will not burn but the packaging is combustible.

5.3 Advice for fire fighters

Use full protective clothing and self-contained breathing apparatus.

Further information: The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing media must be disposed of in accordance with official regulation.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures

Use personal protective clothing.

6.2 Environmental Precautions

Prevent contamination of soil, drains and surface waters. Do not discharge contaminated water/ fire-fighting water into drains/ surface water/ groundwater.

6.3 Methods and material for containment and cleaning up

Collect spillage by sweeping or industrial vacuum cleaner. keep in suitable closed container for disposal.

6.4 Reference to other sections

For personal protection see section 8 and disposal section 13
SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling
Avoid the formation and deposition of dust. Use only outdoors or in a well ventilated area (P271). For PPE see section 8. Take off contaminated clothing and wash before re-use (P362).

Advice on protection against fire and explosion
Take precautionary measures against static discharge if using plastic packaging.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well ventilated place. Keep containers tightly closed. Keep cool and dry, away from direct sunlight or heat.

Protect from temperatures below: Not applicable
Protect from temperatures above: 40 °C

Suitable storage materials: Original containers.

Higher temperatures and humidity will reduce the shelf life of the product and may cause the powder to form lumps. The powder will also be difficult to mix into a paste. Under normal conditions (21°C) a shelf life of 12 months or more is possible.

7.3 Specific end use(s) As per section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits: OEL (Occupational Exposure Standard OES)

<table>
<thead>
<tr>
<th></th>
<th>mg/m³</th>
<th>ppm</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA</td>
<td>-</td>
<td></td>
<td>(EH40 UK) OES 8 hr</td>
</tr>
<tr>
<td>TWA</td>
<td></td>
<td></td>
<td>(EH40 UK)</td>
</tr>
<tr>
<td>TLV-TWA</td>
<td></td>
<td></td>
<td>(ACIGH)</td>
</tr>
<tr>
<td>STEL</td>
<td>-</td>
<td></td>
<td>(EH40 UK)</td>
</tr>
<tr>
<td>Sodium silicofluoride</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td>2.5</td>
<td>OSHA</td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEL</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.1.2 Biological limit value
Not available

8.1.3 PNECs and DNELs
Not available

8.2 Exposure Controls

8.2.1 Appropriate engineering controls: Effective exhaust ventilation system

8.2.2 Personal Protective Equipment:

Eye/face Protection
Tightly fitting safety goggles (e.g. EN166)

Skin Protection/Hand
Gloves: Chemical resistant gloves (e.g. EN374) Butyl rubber: 0.7 mm coating thickness. Nitrile rubber: 0.4 mm coating thickness. Check with PPE manufacturer. Replace immediately if signs of degradation are observed.

Other
Wear closed work clothing.

Respiratory Protection
In the case of insufficient ventilation or severe dusts
Cartridge: e.g. EN143 Type P-S (check with PPE manufacturer)

Hygiene measures
General industrial hygiene practice

8.2.3 Environmental exposure controls

Local exhaust ventilation and take precautionary measures against static discharge.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fine powder</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>pH Value</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point/Freezing PT</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Initial Boiling Point/Range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flashpoint °C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid/gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>Not Available</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour Density (air=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Colour</td>
<td>Cream</td>
</tr>
<tr>
<td>Odour Threshold ppm</td>
<td>Not Available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>2.7 g/ml</td>
</tr>
<tr>
<td>Solubility In Water @ 20°C</td>
<td>14g/100g</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto Ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature °C</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity mPa.s @ 25°C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not oxidising</td>
</tr>
</tbody>
</table>

9.2 Other information

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable under normal conditions.

10.2 Chemical Stability
Stable under recommended storage and handling conditions.

10.3 Possibility of Hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4 Conditions to Avoid
No decomposition if stored and applied as directed.

10.5 Incompatible materials
Incompatible with strong acids, alkaline materials, iron containing materials. It may react with strong mineral acids to liberate hydrogen fluoride or hydrofluoric acid which are highly toxic and corrosive.

10.6 Hazardous Decomposition Products.
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects of the mixture

Acute toxicity
Contains components that are hazardous by the following routes:
- skin, eye, inhalation.

<table>
<thead>
<tr>
<th>LD₅₀</th>
<th>ORAL TOXICITY MOUSE</th>
<th>70 mg/kg</th>
<th>Sodium silicofluoride</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD₅₀</td>
<td>ORAL TOXICITY IN RATS</td>
<td>125 mg/kg</td>
<td>Sodium silicofluoride</td>
</tr>
<tr>
<td>LD₅₀</td>
<td>DERMAL TOXICITY RABBITS</td>
<td>500 mg/kg</td>
<td>Sodium silicofluoride</td>
</tr>
<tr>
<td>LC₅₀</td>
<td>INHL TOXICITY IN RATS</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD₅₀</td>
<td>DERMAL TOXICITY RABBITS</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>LC₅₀</td>
<td>ORAL TOXICITY IN RATS</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD₅₀</td>
<td>DERMAL TOXICITY RABBITS</td>
<td>mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
May cause irritation

Serious eye damage / irritation
May cause irritation

Respiratory or skin sensitisation
Not classified

Germ cell mutagenicity
Not classified

Carcinogenicity
**Reproductive toxicity**  
Not classified

**Specific Target Organ Toxicity (Repeated Exposure)**  
Not classified

**Specific Target Organ Toxicity (Single Exposure)**  
Not classified

**Aspiration hazard**  
Not classified

### 11.2 Other information
Continuous or intermittent exposure to inorganic fluorides can lead to appreciable accumulation of fluoride in bone, and, to development of osteosclerosis and other bone changes.

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Organ</th>
<th>Test Duration</th>
<th>Effect Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL₅₀ Fish</td>
<td>(96 hr)</td>
<td>mg/l</td>
<td>Brachydanio rerio</td>
</tr>
<tr>
<td>EC₅₀ Invertebrates</td>
<td>(48 hr)</td>
<td>mg/l</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>EL₅₀ Algae</td>
<td>(72 hr)</td>
<td>mg/l</td>
<td>Selenastrum capricornutum</td>
</tr>
</tbody>
</table>

Sodium silicofluoride

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Organ</th>
<th>Test Duration</th>
<th>Effect Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL₅₀ Fish</td>
<td>(96 hr)</td>
<td>37.5 mg/l</td>
<td>Lepomis macrochirus</td>
</tr>
<tr>
<td>EC₅₀ Invertebrates</td>
<td>(48 hr)</td>
<td>35.4 mg/l</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>EL₅₀ Algae</td>
<td>(72 hr)</td>
<td>18.5 mg/l</td>
<td>Selenastrum capricornutum</td>
</tr>
</tbody>
</table>

Micro organisms/ effect upon activated sludge

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Organ</th>
<th>Test Duration</th>
<th>Effect Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC₅₀ Bacteria</td>
<td>(3.0 hr)</td>
<td>mg/l</td>
<td>Activated sludge, domestic</td>
</tr>
</tbody>
</table>

#### 12.2 Persistence and degradability

Not biodegradable

#### 12.3 Bioaccumulative potential

Not available

#### 12.4 Mobility in soil

Sinks in water. A small percentage (~30%) is water soluble. If the product enters soil, it will be mobile and may contaminate groundwater.

#### 12.5 Results of PBT and vPvB assessment

**PBT:** This mixture contains no substances considered as PBT

**vPvB:** This mixture contains no substances considered as vPvB

#### 12.6 Other adverse effects

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Do not release untreated into natural waters. This product has not been tested. The statement has been derived from products of a similar structure and composition.
SECTION 13: DISPOSAL CONSIDERATION

13.1 Waste treatment methods
The preparation must be disposed of by special means. Dispose by landfill via a licensed waste disposal contractor in accordance with local and national regulations.

Contaminated packaging should be emptied as far as possible, they can then be recycled after being thoroughly cleaned by a licensed contractor. Labels must not be removed from containers until they have been cleaned. Packaging materials that are not contaminated should be treated as household waste or as recycling material.

13.2 Additional information
The UK Environmental Protection (Duty of Care) regulations (EP) and amendments should be noted (United Kingdom)
Dispose of contents/container according to the end user disposal procedure (P501)

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR
RID
IMDG
IATA
ADN

14.2 Proper shipping name
ADR
RID
IMDG
IATA
ADN

14.3 Transport Hazard Class
ADR
RID
IMDG
IATA
ADN

14.4 Packing Group
ADR
RID
IMDG
IATA
ADN

14.5 Environmental hazards
ADR
RID
IMDG
IATA
ADN

14.6 Special Precautions for user
Not classified as dangerous in the meaning of transport regulations

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
Not applicable
SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the mixture
EU Legislation

Employment restrictions: Observe employment restrictions for young people, for child bearing mothers/ nursing and for women of child-bearing age.

15.2 Chemical Safety Assessment
Assessed to be not PBT/vPvB.

SECTION 16: OTHER INFORMATION *

* SECTIONS REVISED 7, 10  Supercedes date 05.09.2018

Grade name amendment.

Legend
PBT Persistent, Bioaccumulative and Toxic
vPvB very Persistent and very Bioaccumulative

Data sources Supplier information

Other hazard phrases listed in this MSDS
H301 Toxic if swallowed
H311 Toxic in contact with skin
H331 Toxic by inhalation

Training advice General industrial hygiene practice. Do not eat, drink or smoke when using this product (P270)
Manual handling

Further information
This information relates only to the specific material designated and is to the best of the company’s knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to it’s accuracy, reliability or completeness and without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing or construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Glassbond Ltd’s General Conditions of Sale.