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

1.1 Product Identifier
Product name: GLASSBOND SAUEREISEN ZIRCON POTTING CEMENT N°13
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: Potting and encapsulation for electrical insulation
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: NOT CLASSIFIED
Environmental: NOT CLASSIFIED

2.1.2 Directive 1999/45/EC(DPD): NOT CLASSIFIED

2.2 Label elements
According to Regulation (EC) No. 1272/2008(CLP)

NONE
SIGNAL WORD (S)                         NONE
HAZARD STATEMENT(S)                     NONE

PRECAUTIONARY STATEMENT(S)

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 No</th>
<th>EC No</th>
<th>REACH No</th>
<th>CPL EC 1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boric acid</td>
<td>0.5-1.5</td>
<td>10043-35-3</td>
<td>233-139-2</td>
<td>01-211948683-25</td>
<td>H360FD: may damage fertility or the unborn Child. 1B</td>
</tr>
</tbody>
</table>

3.3 Additional information
Boric acid SVHC support document (ECHA 9th June 2010 Specific concentration limits: Repr. 1B; H360FD: Conc ≥5.5%)

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
Immediately remove contaminated clothing, take care not to contaminate unaffected areas.

Inhalation
No emergency care anticipated, other than removal from exposure.

Eyes
Rinse immediately with running water for at least 15 minutes holding the eyelid open; consult an eye specialist.

Skin
Wash thoroughly with water and soap
If skin irritation or rash occurs get medical attention (P333+P313)

Ingestion
Immediately rinse the mouth with water and drink plenty of water. Obtain medical attention immediately, 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. Ensure thorough ventilation of stores and work areas. For PPE see section 8. Contaminated clothing should not be allowed out of the workplace (P272). Wash contaminated clothing before reuse (P363).

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

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. The powder should be stored under cover, in a well ventilated, cool, dry place and 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 (21ºC) 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>Dust</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>10 ppm</td>
<td>4 ppm</td>
</tr>
<tr>
<td>(EH40 UK) OES 8 hr</td>
<td>(EH40 UK)</td>
<td>(EH40 UK)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dust</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(EH40 UK)</td>
<td>(EH40 UK)</td>
<td>(EH40 UK)</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:

<table>
<thead>
<tr>
<th>Eye/face Protection</th>
<th>Tightly fitting safety goggles (e.g. EN166)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Protection/Hand</td>
<td>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. Wear closed work clothing.</td>
</tr>
<tr>
<td>Other</td>
<td>Respiratory Protection</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hygiene measures</td>
<td>General industrial hygiene practice</td>
</tr>
</tbody>
</table>

8.2.3 Environmental exposure controls
No special environmental precautions required
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>2.2</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</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>2.5 g/ml</td>
</tr>
<tr>
<td>Solubility in Water @ 20°C</td>
<td>&lt;5 % g/l</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 applicable</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 reaction known under conditions of normal use
10.4 Conditions to Avoid No decomposition if stored and applied as directed.
10.5 Incompatible materials         Acids
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 Rats</th>
<th>3500-4100 mg/kg</th>
<th>Boric acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD₅₀</td>
<td>Dermal Toxicity Rats</td>
<td>ml/kg</td>
<td></td>
</tr>
<tr>
<td>LC₅₀</td>
<td>Inh. Toxicity in Rats</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD₅₀</td>
<td>Oral Toxicity 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>Inh. Toxicity in Rats</td>
<td>mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/ irritation Irritating
Serious eye damage / irritation Irritating
Respiratory or skin sensitisation The product contains Boric acid which may damage fertility or harm the unborn child
Germ cell mutagenicity Not classified
Carcinogenicity Not classified
### Reproductive toxicity
- Not classified

### STOT SE (SINGLE exposure)
- Not classified

### STOT RE (REPEATED exposure)
- Not classified

### Aspiration hazard
- Not classified

### Other information
- Skin sensitisation might occur in people with hypersensitive skin.

#### SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Species</th>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>(96 hr)</td>
<td>LL₅₀</td>
<td>mg/l</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Invertebrates</td>
<td>(48 hr)</td>
<td>EC₅₀</td>
<td>mg/l</td>
<td>Selenastrum capricornutum</td>
</tr>
<tr>
<td>Algae</td>
<td>(72hr)</td>
<td>EL₅₀</td>
<td>mg/l</td>
<td>Selenastrum capricornutum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Species</th>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>(96 hr)</td>
<td>LL₅₀</td>
<td>mg/l</td>
<td>Lepomis macrochirus</td>
</tr>
<tr>
<td>Invertebrates</td>
<td>(48 hr)</td>
<td>EC₅₀</td>
<td>mg/l</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Algae</td>
<td>(72hr)</td>
<td>EL₅₀</td>
<td>mg/l</td>
<td>Selenastrum capricornutum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro organisms/ effect upon activated sludge</td>
<td>Bacteria</td>
<td>(3.0 hr)</td>
<td>EC₅₀</td>
</tr>
</tbody>
</table>

### 12.2 Persistance and degradability
- Not bio degradable

### 12.3 Bioaccumulative potential
- Not available

### 12.4 Mobility in soil
- Sinks in water. A small percentage (<5%) 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
Boric acid SVHC support document (ECHA 9th June 2010 Specific concentration limits : Repr. 1B; H360FD: Conc ≥5.5%

15.2 Chemical Safety Assessment
Exposure scenarios are not required for this mixture because it is not classified as dangerous according to Directive 67/548/EEC and assessed to be not PBT/vPvB. No risk management measures as defined by REACH have been identified.

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
H360FD May damage fertility or harm or the unborn child

Training advice General industrial hygiene practice.
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 expressively 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.