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

1.1 **Product Identifier**
- **Product name**: GLASSBOND SAUEREISEN SEALING CEMENT No° 33S
- **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**
- **Physical/Chemical**: NOT CLASSIFIED
- **Human health**: STOT RE 2 (inhalation), Eye damage 1, Skin irritant 2
  - Acute toxicity 4 (inhalation dermal and oral),
- **Environmental**: NOT CLASSIFIED

2.2 **Label elements**
- **According to Regulation (EC) No. 1272/2008(CLP)**
  - STOT RE 2 (inhalation)
  - GHS08
  - GHS05

SDS – Sauereisen No 33S Oct 2018

Date Revised: 31.10.18
Revision: 17

Product: SEALING CEMENT N°33S

**Signal Word(s)**

**HAZARD STATEMENT(s)**

<table>
<thead>
<tr>
<th>Signal Word(s)</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H373</td>
<td>Causes damage to lungs through prolonged or repeated exposure via inhalation</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation Cat 2</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage Cat 1</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled Acute Tox 4</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin Acute Tox 4</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed Acute Tox 4</td>
</tr>
</tbody>
</table>

**Precautionary Statement(s)**

| P260           | Do not breathe dust |
| P280           | Wear protective gloves /protective clothing/eye protection/face protection |
| P305 + P351 +  | IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| P338           | |
| P310           | Immediately call a POISON CENTRE or doctor |

**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>
<tbody>
<tr>
<td>Silica</td>
<td>&gt;70</td>
<td>14808-60-7</td>
<td>238-878-4</td>
<td>Exempted</td>
<td>H373: STOT RE 2</td>
</tr>
<tr>
<td>Sodium silicate</td>
<td>&lt;20</td>
<td>1344-09-8</td>
<td>215-687-4</td>
<td>01-2119448725-31</td>
<td>H335: STOT SE 3 (inhalation)</td>
</tr>
<tr>
<td>Sodium silico fluoride</td>
<td>3≤10</td>
<td>16893-85-9</td>
<td>240-934-8</td>
<td>01-2119519245-43-0002</td>
<td>H331: Acute Tox 3 (inhalation)</td>
</tr>
</tbody>
</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. When heated to decomposition it emits toxic and corrosive fumes of hydrogen fluoride.

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
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
Store locked up (P405). Store in a well ventilated place. Keep containers tightly closed.(P403+P233) 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 (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></th>
<th>mg/m³</th>
<th>ppm</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica crystalline TWA</td>
<td>-</td>
<td>inhalable</td>
<td>(EH40 UK) OES 8 hr</td>
</tr>
<tr>
<td>Silica crystalline TWA</td>
<td>0.3</td>
<td>respirable</td>
<td>(EH40 UK)</td>
</tr>
<tr>
<td>Silica crystalline TLV-TWA</td>
<td>0.1</td>
<td>respirable</td>
<td>(ACIGH)</td>
</tr>
<tr>
<td>Sodium silicate STEL</td>
<td>-</td>
<td>(EH40 UK)</td>
<td></td>
</tr>
<tr>
<td>Sodium silicofluoride TWA</td>
<td>2.0</td>
<td>recommended</td>
<td>OSHA</td>
</tr>
<tr>
<td>Sodium silicofluoride 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>13</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>30 g/100g</td>
</tr>
<tr>
<td>Partition Coefficient (n-octanol/water)</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>Acute toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse</td>
<td>Oral toxicity</td>
<td>70 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>Oral toxicity</td>
<td>125 mg/kg</td>
</tr>
<tr>
<td>Rabbits</td>
<td>Dermal toxicity</td>
<td>500 mg/kg</td>
</tr>
<tr>
<td>Rats</td>
<td>Inhalation</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Rabbits</td>
<td>Dermal toxicity</td>
<td>&gt;2000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
- Irritating

Serious eye damage / irritation
- Serious eye damage

Respiratory or skin sensitisation
- Not classified

Germ cell mutagenicity
- Not classified

Carcinogenicity
- Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis cause by deposition in the lungs of fine respirable particles of crystalline silica.
Reproductive toxicity  Not classified

Specific Target Organ Toxicity (Repeated Exposure) STOT RE2

Specific Target Organ Toxicity (Single Exposure) Not classified

Aspiration hazard Not classified

11.2 Other information

In 1997, IARC (International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. 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>Substance</th>
<th>Toxicity</th>
<th>Concentration</th>
<th>Test Organism</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL₅₀ Fish (96 hr)</td>
<td>Sodium silicate</td>
<td>1108 mg/l</td>
<td>Brachydani ro reio</td>
<td></td>
</tr>
<tr>
<td>EC₅₀ Invertebrates (48 hr)</td>
<td>1700 mg/l</td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL₅₀ Algae (72hr)</td>
<td>Sodium silicofluoride</td>
<td>18.5 mg/l</td>
<td>Selenastrum capricornutum</td>
<td></td>
</tr>
<tr>
<td>LL₅₀ Fish (96 hr)</td>
<td>37.5 mg/l</td>
<td>Lepomis macrochirus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC₅₀ Invertebrates (48 hr)</td>
<td>35.4 mg/l</td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL₅₀ Algae (72hr)</td>
<td>18.5 mg/l</td>
<td>Selenastrum capricornutum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sodium silicofluoride

Micro organisms/ effect upon activated sludge

EC₅₀ Bacteria (3.0 hr) mg/l Activated sludge, domestic

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

<table>
<thead>
<tr>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
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</thead>
<tbody>
<tr>
<td>NOT CLASSIFIED</td>
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<td></td>
<td></td>
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</table>

14.2 Proper shipping name

<table>
<thead>
<tr>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT CLASSIFIED</td>
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</table>

14.3 Transport Hazard Class

<table>
<thead>
<tr>
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<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
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</table>

14.4 Packing Group

<table>
<thead>
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<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
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</thead>
<tbody>
<tr>
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14.5 Environmental hazards

<table>
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<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT CLASSIFIED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.6 Special Precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in case of accident or spill

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

Directive 2008/98 / EC waste framework
Employment restrictions: Observe employment restrictions for young mothers to procreate / nursing and women of childbearing 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

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

Data sources Supplier information

Other hazard and risk phrases listed in this MSDS
H301 Toxic if swallowed
H311 Toxic in contact with skin
H331 Toxic by inhalation
H335 May cause respiratory irritation

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.