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

1.1 Product Identifier
Product name : GLASSBOND SAUEREISEN N° 14 LIQUID
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 Eye damage 2, Skin Irritant 2
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)

GS07
SIGNAL WORD (S)          WARNING
HAZARD                    H315 Causes skin irritation.       Cat2
STATEMENT(S)              H319 Causes serious eye irritation.  Cat2

PRECAUTIONARY             P280 Wear protective gloves /protective clothing/eye protection/face
STATEMENT(S)              protection
P305+                     IF IN EYES: rinse cautiously with water for several minutes. Remove
P351+                     contact lenses, if present and easy to do. Continue rinsing
P338

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 Solution of inorganic silicate

<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>Sodium silicate</td>
<td>30-35</td>
<td>1344-09-8</td>
<td>215-687-4</td>
<td>01-2119448725-31</td>
<td>H319: Eye damage 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H315: Skin Irritant 2</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 (aerosol) remove victim to fresh air and keep at rest in a position comfortable for breathing.

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
IF ON SKIN wash exposed areas thoroughly after handling (P264)
If skin irritation or rash occurs get medical attention (P332 + P313)

Ingestion
IF SWALLOWED: Rinse mouth (P301 + P330).
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 serious eye irritation. (highly alkaline)

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:
Aqueous solution. Not combustible.

5.2 Special hazards arising from the mixture
The liquid will not burn but the packaging is combustible.

5.3 Advice for fire fighters
No special measures required.

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
Soak up with inert absorbent (e.g. sand). Dispose of material in accordance with official regulations.

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 contact with skin and eyes. Practice good housekeeping. Avoid contact with skin and eyes. Practice good housekeeping. Always replace cap after use. For PPE see section 8. Wash contaminated clothing before reuse (P363)

Advice on protection
Normal measures for preventive fire protection against fire and explosion

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store locked up (P405), under cover, in a well ventilated, cool, dry place and away from direct sunlight or heat. Protect from freezing.
Protect from temperatures below: 4 °C
Protect from temperatures above: 40 °C
Suitable storage materials: Original containers.
Higher temperatures will reduce the shelf life of the product. 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>Parameter</th>
<th>TWA</th>
<th>TWA</th>
<th>TLV-TWA</th>
<th>STEL</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium silicate</td>
<td>2.0 ppm</td>
<td>(EH40 UK) OES 8 hr</td>
<td>(ACIGH)</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: Prevent formation of aerosol.

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. Wear closed work clothing.

Other

Respiratory Protection
Not required under normal working conditions.

Hygiene measures
General industrial hygiene practice

8.2.3 Environmental exposure controls
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>pH Value</td>
<td>&lt;11.5</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>0°C</td>
<td></td>
</tr>
<tr>
<td>Initial Boiling Point/Range</td>
<td>100°C</td>
<td></td>
</tr>
<tr>
<td>Flashpoint °C</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid/Gas)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>Not Available</td>
<td></td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>Not Available</td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
<td></td>
</tr>
<tr>
<td>Odour Threshold ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water @ 20°C</td>
<td>Miscible</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>1.2 - 1.6 g/ml</td>
<td></td>
</tr>
<tr>
<td>Melting Point / Freezing Point</td>
<td>0°C</td>
<td></td>
</tr>
<tr>
<td>Solubility in Water @ 20°C</td>
<td>Miscible</td>
<td></td>
</tr>
<tr>
<td>Viscosity mPa.s @ 25°C</td>
<td>20 - 30 mPa.s</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not oxidising</td>
<td></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 Incompatible materials | Freezing. Do not leave containers open. |
10.5 Incompatible materials       | Incompatible with strong acids. Aqueous solutions will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Can react with sugar residues to form carbon monoxide. |
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 ORAL TOXICITY IN RATS</th>
<th>3400 mg/kg</th>
<th>Sodium silicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 DERMAL TOXICITY RABBITS</td>
<td>&gt;5000 mg/kg</td>
<td>Sodium silicate</td>
</tr>
<tr>
<td>LC50 INHAL TOXICITY IN RATS</td>
<td>&gt;2.06 g/m³</td>
<td>Sodium silicate</td>
</tr>
<tr>
<td>LD50 DERMAL TOXICITY RABBITS</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>LC50 ORAL TOXICITY IN RATS</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 DERMAL TOXICITY RABBITS</td>
<td>mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Irritating Cat2
Serious eye damage/irritation: Irritating Cat2
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
**Reproductive toxicity**

- Not classified

**Specific Target Organ Toxicity (Repeated Exposure)**

- Not classified

**Specific Target Organ Toxicity (Single Exposure)**

- Not classified

**Aspiration hazard**

- Not classified

---

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Test Parameter</th>
<th>Endpoint</th>
<th>Endpoint</th>
<th>Endpoint</th>
<th>Endpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL₅₀ Fish</td>
<td>(96 hr)</td>
<td>1108 mg/l</td>
<td>Brachydanio rerio</td>
<td></td>
</tr>
<tr>
<td>EC₅₀ Invertibrates</td>
<td>(48 hr)</td>
<td>1700 mg/l</td>
<td>Daphnia magna</td>
<td></td>
</tr>
<tr>
<td>EL₅₀ Algae</td>
<td>(72 hr)</td>
<td>Not available</td>
<td>Selenastrum capricornutum</td>
<td></td>
</tr>
<tr>
<td>LL₅₀ Fish</td>
<td>(96 hr)</td>
<td>mg/l</td>
<td>Lepomis macrochirus</td>
<td></td>
</tr>
<tr>
<td>EC₅₀ Invertibrates</td>
<td>(48 hr)</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td></td>
</tr>
<tr>
<td>EL₅₀ Algae</td>
<td>(72 hr)</td>
<td>mg/l</td>
<td>Selenastrum capricornutum</td>
<td></td>
</tr>
</tbody>
</table>

**Micro organisms/ effect upon activated sludge**

<table>
<thead>
<tr>
<th>Test Parameter</th>
<th>Endpoint</th>
<th>Endpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC₅₀ Bacteria</td>
<td>(3.0 hr)</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

#### 12.2 Persistance and degradability

- Not biodegradable

#### 12.3 Bioaccumulative potential

- Not available

#### 12.4 Mobility in soil

- Soluble in water. 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

Dispose of contents/container according to the end user disposal procedure (P501). 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)

SECTION 14 - TRANSPORT INFORMATION

14.1 UN number

ADR
RID
IMDG
IATA
ADN

NOT CLASSIFIED

14.2 Proper shipping name

ADR
RID
IMDG
IATA
ADN

NOT CLASSIFIED

14.3 Transport Hazard Class

ADR
RID
IMDG
IATA
ADN

NOT CLASSIFIED

14.4 Packing Group

ADR
RID
IMDG
IATA
ADN

NOT CLASSIFIED

14.5 Environmental hazards

ADR
RID
IMDG
IATA
ADN

NOT CLASSIFIED

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 10 Supercedes date 10.08.2017

The Safety Data Sheets have been revised throughout in accordance with CLP/GHS requirements

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

Data sources Supplier information

Other hazard phrases listed in this MSDS
H315 Causes skin irritation
H319 Causes serious eye irritation

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.