Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: FORTAFIX FLAMESEAL - FIRE RESISTANT ADHESIVE SEALANT
CAS number: Mixture
EINECS number: Mixture
Product code: FF154

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: PC1: Adhesives, sealants. PROC21: Low energy manipulation of substances bound in materials and/or articles ERC5: Industrial use resulting in inclusion into or onto a matrix

1.3. Details of the supplier of the safety data sheet

Company name: Minkon Ltd
Tofts Farm Industrial Estate
Brenda Road
Hartlepool
UK
TS25 2BS
United Kingdom
Tel: +44 (0) 1429 273 252
Fax: +44 (0) 1429 232 611
Email: enquiries@minkon.co.uk

1.4. Emergency telephone number

Emergency tel: +441429273252 MTWT:08:30-17:00 F:08:30-14:00
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

2.2. Label elements

Label elements:
Precautionary statements: P262: Do not get in eyes, on skin, or on clothing.
P280: Wear eye protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

[cont...]
2.3. Other hazards

Other hazards: Alkaline Solution. Irritating to eyes. Irritating to skin.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Non-classified ingredients:

RAW MATERIAL - NA SILICATE SOLUTION, MR = >3.2, SOLIDS = <40% - REACH registered number(s): 01-2119448725-31-0000

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>215-687-4</td>
<td>1344-09-8</td>
<td>-</td>
<td>-</td>
<td>30-50%</td>
</tr>
</tbody>
</table>

Contains: Alkaline Silicate Glass Solution.

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Remove contact lenses In case of eye contact flush abundantly with water; have eye bath available. Do not rub eyes. Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water.

Inhalation: Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation at the site of contact.

Eye contact: The eyes may water profusely. There may be irritation and pain.

Ingestion: There may be irritation of the throat.

Inhalation: Not applicable.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Not applicable.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

[cont...]
Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Wash the spillage site with large amounts of water.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): PC1: Adhesives, sealants.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2. Exposure controls

Engineering measures: Local exhaust ventilation if solution is sprayed. Ensure good work practices. Wash splashes immediately. DO NOT eat, drink or smoke in the workplace.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

State: Paste
Colour: Off-white
Odour: Odourless

Evaporation rate: Slow
Oxidising: Non-oxidising (by EC criteria)
Solubility in water: Binder soluble in water/filler insoluble
Viscosity: Viscous
Relative density: 1.5-2.5

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: Product is stable under normal temperature and storage conditions

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: Not applicable.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>1600-3200</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Non-classified ingredients:

[cont...]
SAFETY DATA SHEET
FORTAFIX FLAMESEAL - FIRE RESISTANT ADHESIVE SEALANT

RAW MATERIAL - NA SILICATE SOLUTION, MR = >3.2, SOLIDS = <40%

<table>
<thead>
<tr>
<th></th>
<th>RAT</th>
<th>LD50</th>
<th>5000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DERMAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORAL</td>
<td></td>
<td></td>
<td>3400 mg/kg</td>
</tr>
</tbody>
</table>

**Symptoms / routes of exposure**

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** The eyes may water profusely. There may be irritation and pain.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** Not applicable.

**Section 12: Ecological information**

12.1. Toxicity

**Hazardous ingredients:**

RAW MATERIAL - NA SILICATE SOLUTION, MR = >3.2, SOLIDS = <40%

<table>
<thead>
<tr>
<th></th>
<th>48H EC50</th>
<th>1700 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FISH</td>
<td>96H LC50</td>
<td>1108 mg/l</td>
</tr>
</tbody>
</table>

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Soluble Silicates upon dilution rapidly depolymerise into molecular species indistinguishable from natural dissolved silica. Inert and remains stable over time.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Not applicable.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

**Section 13: Disposal considerations**

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Contaminated containers must be completely emptied. Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

[cont...]
Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information: All the alkali silicates, even those that are not classified as Dangerous Substances, are alkaline chemicals. Therefore contact with eyes, skin and clothes should be avoided and the usual procedures for handling all chemicals should be followed.

This product is a water based adhesive cement - VOC Content 0 gram/litre

Shelf life - 12 months

This product is ROHS compliant.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.