SAFETY DATA SHEET
HIGH TEMPERATURE ADHESIVE FIRE CEMENT - FIREBRAND BROWN

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

1.1. Product identifier

   Product name: HIGH TEMPERATURE ADHESIVE FIRE CEMENT - FIREBRAND BROWN
   CAS number: Mixture
   EINECS number: Mixture
   Product code: FF210 FF211

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: Eye Dam. 1: H318; Skin Irrit. 2: H315
   Most important adverse effects: Causes skin irritation. Causes serious eye damage.

2.2. Label elements

   Label elements:
   Hazard statements: H315: Causes skin irritation.
                   H318: Causes serious eye damage.
   Hazard pictograms: GHS05: Corrosion

[cont...]
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Signal words: Danger
Precautionary statements:
P102: Keep out of reach of children.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call POISON CENTER/doctor.
P321: Specific treatment (see instructions on this label)

2.3. Other hazards
Other hazards: Alkaline Solution. Irritating to skin. Risk of serious damage to eyes.
PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

RAW MATERIAL - NA SILICATE SOLUTION, MR = 1.6 - 2.6 - REACH registered number(s): 01-211944872531
215-687-4 1344-09-8 - Skin Irrit. 2: H315; Eye Dam. 1: H318 10-30%

Contains: Alkaline Silicate Glass Solution.

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. 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. Transfer to hospital for specialist examination.
Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.
Inhalation: Not applicable.

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

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: The eyes may water profusely. There may be irritation and pain. May cause permanent damage.
Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

[cont...]
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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. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive.

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.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust.

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: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

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

Hazardous ingredients:

**RAW MATERIAL - NA SILICATE SOLUTION, MR = 1.6 - 2.6**

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Oral</td>
<td>0.80 mg/kg bw/d</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>1.59 mg/kg bw/d</td>
<td>Workers</td>
<td>Systemic</td>
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<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>0.80 mg/kg bw/d</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>7.5 mg/l</td>
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<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>1 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Microorganisms in sewage treatment</td>
<td>348 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Respiratory protection not required.

- **Hand protection:** Gloves (alkali-resistant).
- **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:** Brown or Black
- **Odour:** Odourless
- **Evaporation rate:** Slow
- **Oxidising:** Non-oxidising (by EC criteria)
- **Solubility in water:** Binder soluble in water/filler insoluble
- **Viscosity:** Viscous
- **Relative density:** 2.0 - 3.0
- **pH:** >11.5

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

[cont...]
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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: Heat.

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

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

Hazardous ingredients:

RAW MATERIAL - NA SILICATE SOLUTION, MR = 1.6 - 2.6

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DERMAL</td>
<td>RAT</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>RAT</td>
<td>LD50</td>
<td>3400</td>
<td>mg/kg</td>
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</tbody>
</table>

Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>DRM</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>OPT</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

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

Eye contact: The eyes may water profusely. There may be irritation and pain. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

[cont...]
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Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

RAW MATERIAL - NA SILICATE SOLUTION, MR = 1.6 - 2.6

<table>
<thead>
<tr>
<th>Test Species</th>
<th>Parameter</th>
<th>EC50/LC50</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia magna</td>
<td>48H EC50</td>
<td>1700 mg/l</td>
<td></td>
</tr>
<tr>
<td>ZEBRAFISH (Brachydanio rerio)</td>
<td>96H LC50</td>
<td>1108 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

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.

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

<table>
<thead>
<tr>
<th>Other information:</th>
<th>This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* indicates text in the SDS which has changed since the last revision.</td>
</tr>
<tr>
<td>Phrases used in s.2 and s.3:</td>
<td>H315: Causes skin irritation.</td>
</tr>
<tr>
<td></td>
<td>H318: Causes serious eye damage.</td>
</tr>
<tr>
<td>Legal disclaimer:</td>
<td>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.</td>
</tr>
</tbody>
</table>