SAFETY DATA SHEET

FORTAFIX U529NH - HIGH TEMPERATURE STRAIN GAUGE CEMENT

Compilation date: 01/03/2017
Revision date: 04/07/2018
Revision No: 6

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

1.1. Product identifier

Product name: FORTAFIX U529NH - HIGH TEMPERATURE STRAIN GAUGE CEMENT
CAS number: Mixture
EINECS number: Mixture
Product code: FF153

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.
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.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

RAW MATERIAL - MONO ALUMINIUM PHOSPHATE SOLUTION - REACH registered number(s): 2119490078-32-000

<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>236-875-2</td>
<td>13530-50-2</td>
<td>-</td>
<td>Eye Dam. 1: H318</td>
<td>30-50%</td>
</tr>
</tbody>
</table>

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: 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: Remove casualty from exposure ensuring one's own safety whilst doing so.

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: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. 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.

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

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

[cont...]
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: In combustion emits toxic fumes.

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. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. 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. 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. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging. Glass.

7.3. Specific end use(s)

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

Section 8: Exposure controls/personal protection

[cont...]
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8.1. Control parameters

Hazardous ingredients:

RAW MATERIAL - MONO ALUMINIUM PHOSPHATE SOLUTION

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8 hour TWA</td>
</tr>
<tr>
<td>UK</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

DNEL/PNEC Values

Hazardous ingredients:

RAW MATERIAL - MONO ALUMINIUM PHOSPHATE SOLUTION

<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>Inhalation</td>
<td>4.07 mg/m³</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>3.04 mg/m³</td>
<td>Consumers</td>
<td>Systemic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Fresh water</td>
<td>0.032725 mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PNEC</td>
<td>Marine water</td>
<td>0.003273 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: Self-contained breathing apparatus must be available in case of emergency.

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: Liquid

Colour: White

Odour: Odourless

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible in all proportions

Viscosity: Viscous

pH: No data available.

VOC g/l: 0

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. Decomposition may occur on exposure to conditions or materials listed below.

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
Hazardous ingredients:
RAW MATERIAL - MONO ALUMINIUM PHOSPHATE SOLUTION

<table>
<thead>
<tr>
<th>Route</th>
<th>Hazard</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>Serious eye damage/irritation</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Dust/Mist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Route</th>
<th>Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBT</td>
<td>LD50</td>
</tr>
<tr>
<td>RAT</td>
<td>4H LC50</td>
</tr>
<tr>
<td>RAT</td>
<td>LD50</td>
</tr>
</tbody>
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<thead>
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<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: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. 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.

Section 12: Ecological information

[cont...]
12.1. Toxicity

Hazardous ingredients:

**RAW MATERIAL - MONO ALUMINIUM PHOSPHATE SOLUTION**

<table>
<thead>
<tr>
<th>Daphnia magna</th>
<th>48H EC50</th>
<th>&gt;100 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAINBOW TROUT (Onchorhynchus mykiss)</td>
<td>96H LC50</td>
<td>&gt;100 mg/l</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

Mobility: Readily absorbed into 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 in accordance with local authority requirements.

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

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3:

H315: Causes skin irritation.

H318: Causes serious eye damage.

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.