FURSE EARTHING & LIGHTNING PROTECTION

CM040 - FurseCEM™ pre-mix
Safety Data Sheet (SDS)

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1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION:

1.1. Product Identifier

Product Name: FurseCEM™ pre-mix
Pure substance/mixture: Mixture

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

Recommended use: Construction material; earthing.
Uses advised against: No additional information available.

1.3. Details of the supplier of the safety data sheet

Company Name: ABB Furse (ABB Ltd.), Wilford Road, Nottingham NG2 1EB United Kingdom.
Contact: Mr. Surinder Kareer, Tel: +44 (0)115 964 3875

2. HAZARDS IDENTIFICATION:

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Skin corrosion/irritation, Category 1A H314
Skin sensitisation, Category 1 H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335

For full text of H statements see section 16
Adverse physicochemical, human health and environmental effects
Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP):

GHS05
GHS07
Signal word (CLP): Danger
Hazardous ingredients: Portland cement
Hazard statements (CLP): H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
Precautionary statements (CLP): P280 - Wear protective clothing, eye protection, face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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 a doctor.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards
Other hazards not contributing to the classification

3. COMPOSITION/INFORMATION ON INGREDIENTS:

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland cement</td>
<td>(CAS-No.) 65997-15-1</td>
<td>20 - 50</td>
<td>Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335</td>
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<td></td>
<td>(EC-No.) 266-043-4</td>
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<tr>
<td></td>
<td>(REACH-no) Exempt</td>
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</table>

Full text of H-statements: see section 16
4. FIRST AID MEASURES:

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice. Show this sheet where possible. If not available, show packaging or label.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water and soap. Take off contaminated clothing.

First-aid measures after eye contact: Rinse immediately with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion: Get immediate medical advice/attention. Do not induce vomiting. Rinse mouth out with water. Drink plenty of water. Never give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation: Inhalation of dust: May cause shortness of breath, tightness of the chest, sore throat and coughing. May cause respiratory irritation.

Symptoms/effects after skin contact: May cause severe burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact: May cause serious damage to eyes.

Symptoms/effects after ingestion: May cause gastric irritation.

Chronic symptoms: In case of excessive dust production: Possible respiratory damage following repeated or prolonged inhalation.

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

Treat symptomatically.

5. FIRE FIGHTING MEASURES:

5.1. Extinguishing media

Suitable extinguishing media: The product is not flammable. Adapt extinguishing media to the environment.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Toxic fumes may be released.
5.3. Advice for firefighters

Protection during firefighting: Self-contained breathing apparatus. Complete protective clothing.

6. ACCIDENTAL RELEASE MEASURES:

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Ventilate spillage area. Mark out the contaminated area with signs and prevent access to unauthorized personnel.

6.1.1. For non-emergency personnel

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Shovel or sweep up and put in a closed container for disposal. Minimize generation of dust.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 7 / 8 / 13.

7. HANDLING AND STORAGE:

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool. Protect from sunlight. Store in dry protected location to prevent any moisture contact.

Special rules on packaging: Keep only in original container.

7.3. Specific end use(s)

No additional information available

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

8.1. Control parameters

<table>
<thead>
<tr>
<th>Portland cement (65997-15-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
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<tr>
<td>United Kingdom</td>
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<td>United Kingdom</td>
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<tr>
<td>United Kingdom</td>
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</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.


Eye protection: Tightly fitting safety goggles (EN 166).

Skin and body protection: Protective clothing (EN ISO 13688).

Respiratory protection: If ventilation is insufficient, wear suitable respiratory equipment. Filter: Type FFP2 (EN 149).

Environmental exposure controls: Avoid release to the environment

9. PHYSICAL AND CHEMICAL PROPERTIES:

9.1. Information on basic physical and chemical properties

Physical state: Solid

Appearance: Granular solid.
Colour: Dark grey.
Odour: Odourless.
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Solubility: Water: Insoluble
Log Pow: No data available
Viscosity, kinematic: Not applicable
Viscosity, dynamic: Not applicable
Explosive properties: No data available
Oxidising properties: No data available
Explosive limits: No data available

9.2. Other information
No additional information available

10. STABILITY AND REACTIVITY:

10.1. Reactivity
Solidifies on exposure to water (moisture).

10.2. Chemical stability
Stable at room temperature and without humidity.

10.3. Possibility of hazardous reactions
Reacts with water to form corrosive alkalis.
10.4. Conditions to avoid

Water, humidity.

10.5. Incompatible materials


10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Combustion generates: Carbon dioxide/carbon monoxide.

11. TOXICOLOGICAL INFORMATION:

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td>Acute toxicity (oral)</td>
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<tr>
<td>Acute toxicity (dermal)</td>
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</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
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<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>Serious eye damage, category 1, implicit</td>
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<tr>
<td>Respiratory or skin sensitisation</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
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</tr>
<tr>
<td>Carcinogenicity</td>
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<tr>
<td>Reproductive toxicity</td>
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<td>STOT-single exposure</td>
<td>May cause respiratory irritation.</td>
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<td>STOT-repeated exposure</td>
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<td>Aspiration hazard</td>
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12. ECOLOGICAL INFORMATION:

12.1. Toxicity

<table>
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<td>Acute aquatic toxicity</td>
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<tr>
<td>Chronic aquatic toxicity</td>
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</table>

Portland cement (65997-15-1)

LC50 fish 1 ≥ 1000 mg/l (LC50; 96 h)
12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

13. DISPOSAL CONSIDERATIONS:

13.1. Waste treatment methods
Regional legislation (waste): Disposal must be done according to official regulations.
Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations: Do not allow into drains or water courses.
European List of Waste (LoW) code: 10 13 11 - wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10

14. TRANSPORT INFORMATION:

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</tbody>
</table>
14.4. Packing group

Not applicable  Not applicable  Not applicable  Not applicable  Not applicable

14.5. Environmental hazards

Not applicable  Not applicable  Not applicable  Not applicable  Not applicable

No supplementary information available

14.6. Special precautions for user

Overland transport: Not applicable
Transport by sea: Not applicable
Air transport: Not applicable
Inland waterway transport: Not applicable
Rail transport: Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

15. REGULATORY INFORMATION:

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out
16. OTHER INFORMATION:

16.1. Full text of H- and EUH-statements

Eye Dam. 1  Serious eye damage/eye irritation, Category 1
Skin Corr. 1A  Skin corrosion/irritation, Category 1A
Skin Sens. 1  Skin sensitisation, Category 1
STOT SE 3  Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H314  Causes severe skin burns and eye damage.
H317  May cause an allergic skin reaction.
H318  Causes serious eye damage.
H335  May cause respiratory irritation.

16.2. Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

16.3. Revision history

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<td>All</td>
<td>All</td>
<td>First issue in ABB format.</td>
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