

SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

SUBSTANCE NAME: FIRE CEMENT
DESCRIPTION: HIGH TEMPERATURE FIRE CEMENT
PART NO: 6910000
CAS NO. 1344-09-8
EINECS NO. 215-687-4
COMPANY IDENTIFICATION: CLARKE INTERNATIONAL,
HEMNALL STREET, EPPING, ESSEX. CM16 4LG
BUSINESS TELEPHONE: 01992 565300
BUSINESS FAX: 01992 561562
EMERGENCY TELEPHONE: 020 89887400

2. COMPOSITION/INFORMATION ON INGREDIENTS:

CONTAINS: Contains Alkaline Sodium Silicate solution – Molar Ratio <3.2
SiO₂:Na₂O

3. HAZARDS IDENTIFICATION:

MAIN HAZARDS: Irritating to skin. Risk of serious damage to eyes.
OTHER HAZARDS: Alkaline Solution. Irritating to skin. Risk of serious damage to eyes.

4. FIRST AID MEASURES (SYMPTONS):

SKIN CONTACT: There may be irritation and redness at the site of contact.
EYE CONTACT: May cause permanent damage.
INGESTION: There may be soreness and redness of the mouth and throat.
INHALATION: There may be irritation of the throat with a feeling of tightness in the chest.

4. FIRST AID MEASURES (ACTION):

FIRST AID:

SKIN CONTACT: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Obtain medical attention if symptoms develop.
EYE CONTACT: Bathe the eye with running water for 15 minutes. Consult a doctor.
INGESTION: Do not induce vomiting. Wash out mouth with water. Drink one or two glasses of water or milk.
INHALATION: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA: Not applicable. Aqueous Solution. Non-combustible.
PROTECTION OF FIRE-FIGHTERS: Wear protective clothing to prevent contact with skin and eyes.

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6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTIONS: Do not attempt to take action without suitable protective clothing – see section 8 of SDS. Wear appropriate protective clothing. Wear suitable eye protection. Material can create slippery conditions underfoot.

ENVIRONMENTAL PRECAUTIONS: Do not discharge into drains or rivers. If material enters drains, dilute as much as possible with water and notify the authorities.

CLEAN-UP PROCEDURES: Absorb into dry earth or sand. Transfer to a suitable container. Refer to section 13 of SDS for suitable method of disposal.

7. HANDLING & STORAGE:

HANDLING REQUIREMENTS: Avoid contact with eyes and skin. Eye wash facilities should be readily available. Wear suitable protective equipment. See section 8 – Personal Protection. General good safety practices should be followed in the handling and use of this product. **NO SMOKING, DRINKING OR EATING** should be allowed in areas of storage or use.

STORAGE CONDITIONS: Store in cool, well ventilated area. Storage temperature should be below 50°C. Prevent from freezing. Avoid incompatible materials and conditions – see section 10 of SDS.

SUITABLE PACKAGING: Must only be kept in original packaging.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

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 is required if solution is sprayed. Consult British Standards BS2091 and BS4275 and HSE publication HS(G)53 for further advice on respiratory protective equipment.

HAND PROTECTION: Gloves (alkali-resistant)

EYE PROTECTION: Tightly fitting safety goggles. Ensure eye bath is to hand.

SKIN PROTECTION: PVC apron.

9. PHYSICAL AND CHEMICAL PROPERTIES:

STATE: Putty/dough

COLOUR: Dark grey

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

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pH: >11.0

10. STABILITY AND REACTIVITY:

STABILITY: Stable under normal conditions.

MATERIALS TO AVOID: This product may react violently with acids. This product will react with aluminium, zinc, tin and their alloys, evolving hydrogen.

11. TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY: High temperature adhesive fire cement – TEMCEM

ORL RAT LD50 1600-3200 mg/kg

ROUTES OF EXPOSURE: Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

12. ECOLOGICAL INFORMATION:

MOBILITY: Soluble silicates, upon dilution, rapidly depolymerise into molecular species indistinguishable from natural dissolved silica. The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

PERSISTENCE AND DEGRADABILITY: Soluble Silicates upon dilution rapidly depolymerise into molecular species indistinguishable from natural dissolved silica.

BIOACCUMULATIVE POTENTIAL: No data available.

OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL OPERATIONS: Due to the alkalinity, it is recommended that this material is classified as hazardous waste under EEC Directive 91/689/EEC.

DISPOSAL OF PACKAGING: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

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

14. TRANSPORT INFORMATION:

ADR/RID

SHIPPING NAME: UN CLASS: Not classified as 'Dangerous Goods' under the United Nations Transport recommendations.

15. REGULATORY INFORMATION:

HAZARD SYMBOLS: Irritant.

RISK PHRASES: R38: Irritating to skin.

R41: Risk of serious damage to eyes.

SAFETY PHRASES: S1/2: Keep locked up and out the reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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S28: After contact with skin, wash immediately with plenty of warm soapy water.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S60: This material and its container must be disposed of as hazardous waste.

PRECAUTIONARY PHRASES: Safety data sheet available for professional user on request.

NOTE: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

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.

Shelf life: 12 months.

LEGAL DISCLAIMER: The above information is believed to be correct but does not purport to be all inclusive 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.

LAST UPDATED : 02/08/06