# CHEMICAL SAFETY CARD

**CEM II/A-M (P-L) 42,5 R**

**PORTLAND COMPOSITE CEMENT**

<table>
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<th>CAS #</th>
<th>65997-15-1</th>
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<tr>
<td>EINECS #</td>
<td>266-043-4</td>
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## TYPES OF HAZARD /EXPOSURE

### ACUTE HAZARDS/SYMPTOMS

- **FIRE**
  - The product itself does not burn.
  - Noncombustible Solid.

- **INHALATION**
  - May cause cough and sore throat by inhalation. Although small quantities of dust are not known to be harmful, ill effects are possible if larger quantities are consumed.
  - Portland cement should not be eaten.

- **SKIN CONTACT**
  - Irritating to skin. May cause redness. Dry skin.
  - Discomfort or pain cannot be relied upon to alert a person to hazardous skin exposure.

- **EYE**
  - Risk of serious damage to eyes.
  - Exposure to airborne dust may cause immediate or delayed irritation or inflammation.

- **INGESTION**
  - May cause discomfort if swallowed.
  - Cement may contain trace amounts of free crystalline silica.
  - Prolonged exposure to respirable free silica can aggravate other lung conditions and cause silicosis, a disabling and potentially fatal lung disease.
  - Exposure to portland cement may cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system.

## PREVENTION

- **FIRE**
  - Solid streams of water may be ineffective.

- **INHALATION**
  - Avoid actions that cause dust to become airborne.
  - Use local or general exhaust ventilation to control exposures below applicable exposure limits.
  - Use NIOSH/MSHA or NIOSH approved respirators in poorly ventilated areas, if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation.

- **SKIN CONTACT**
  - Handle with gloves.
  - Recommended: suitable protective gloves e.g. nitrile-butadiene rubber (NBR) gloves.
  - Safety shoes.
  - Handle in accordance with good industrial hygiene and safety practice.
  - Wash hands before breaks and at the end of workday.
  - Wash thoroughly after using product.

- **EYE**
  - Immediately flush eyes thoroughly with water.
  - Continue flushing eye for at least 15 minutes, including under lids, to remove all particles.
  - Call physician immediately.

- **INGESTION**
  - Do not eat, drink, or smoke during work.

## FIRST AID/FIRE FIGHTING

- **FIRE**
  - It is compatible with standard firefighting technique (e.g. use of water, carbon dioxide, dry powder, sand and chemical foam extinguishers).

- **INHALATION**
  - Take affected persons out into the fresh air.
  - Seek medical help if coughing and other symptoms do not subside.

- **SKIN CONTACT**
  - Wash skin with cool water and pH-neutral soap or a mild detergent.
  - Seek medical treatment in all cases of prolonged exposure to wet cement, cement mixtures, liquids from fresh cement products, or prolonged wet skin exposure to dry cement.

- **EYE**
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  - Seek medical treatment in all cases of prolonged exposure to wet cement, cement mixtures, liquids from fresh cement products, or prolonged wet skin exposure to dry cement.

- **INGESTION**
  - Do not induce vomiting.
  - If conscious, have the victim drink plenty of water and call a physician immediately.
  - If symptoms persist, call a physician.
### ACCIDENTAL RELEASE MEASURES
- Ensure adequate ventilation.
- Avoid actions that cause dust to become airborne.
- Avoid inhalation of dust and contact with skin.
- Wear personal protective equipment;
- Try to prevent the material from entering drains or water courses.
- Do not let product enter drains.

### SAFE STORAGE
- Keep portland cement dry until used.
- Normal temperatures and pressures do not affect the material.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Store in a cool, dry, well-ventilated area.
- Keep away from food, drink and animal feeding stuffs.
- Store in original containers.
- Keep containers securely sealed.

### PACKAGING & LABELING
- EC Classification:
  - Hazard Symbol: Xi-Irritant
  - R: 37/38-41
  - S: 22-24-26-28-37/39-64
- UN Classification:
  - UN Class: -
  - UN Packaging Group: -
- GHS Classification:
  - Hazard Pictogram: GHS05
  - Signal Word; Danger
  - Causes skin irritation.
  - Causes serious eye damage.
  - Avoid breathing dust.
  - Wear protective gloves/protective clothing/eye protection/face protection

### IMPORTANT DATA

**PHYSICAL DANGERS:**
- Physical state; Gray, Odorless Solid (Powder),

**CHEMICAL DANGERS:**
- No dangerous reaction known under conditions of normal use.
- Wet Portland cement is alkaline.
- As such it is incompatible with acids, ammonium salts and phosphorous.

**OCCUPATIONAL EXPOSURE LIMITS:**
- Long Term TWA (8 Hr): 10 mg/m³
- Short Term STEL (15 min): 15 10 mg/m³

**PHYSICAL PROPERTIES**
- pH (in water): 11-14,
- Specific Gravity (H₂O=1): 3.00-3.05,
- Bulk density (kg/m³) : 900-1200,
- Seed size, Micron; 3-100.

**ENVIRONMENTAL DATA**
- Biological environment (biota) accumulation potential: Not applicable.
- Take the necessary precautions if the spread of the environment and should act in accordance with local regulations.
- Cement can harden within 2-3 hours if it is touch with water. So, this product should not be discharged into the water channels.

**NOTES**
Portland cement is a mixture of chemical substances produced by burning or sintering at high temperatures (greater than 1200°C (2192°F)) raw materials which are predominantly calcium carbonate, aluminium oxide, silica, and iron oxide. The chemical substances which are manufactured are confined in a crystalline mass. This category includes all of the chemical substances specified below when they are intentionally manufactured in the production of Portland cement. The primary members of the category are \( \text{Ca}_2\text{SiO}_4 \) and \( \text{Ca}_3\text{SiO}_5 \).

**WARNING**
Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information.