SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier
Product name: Portland Cement

1.2 Relevant identified uses of the substance or mixture and uses advised against
Application: Binder for natural and artificially processed aggregates, such as sand, gravel and pebbles, for production of mortar, plaster and concrete.

1.3 Details of the supplier of the safety data sheet
Supplier: AALBORG PORTLAND MALAYSIA SDN BHD
Lot 75244, Pinji Estate, P.O.Box 428, 30750 Ipoh, Perak, Malaysia
Tel: 05-321 8988
Fax: 05-322 2522
aalborg@aalborgportland.com.my
www.aalborgportland.com.my

Responsible for safety data sheet authoring: aalborg@aalborgportland.com.my

Australia contact details:
Company: AALBORG PORTLAND AUSTRALIA PTY. LTD.
PO Box 1016 Eagle Farm BC
Queensland 4009, Australia

Contact No.:
Phone: Toll Free 1800 793 689
Fax: Toll Free 1800 643 470
Office: +61 7 3868 4997
Email: Sales@aalborgportland.com.au
Website: www.aalborgportland.com.au

Contact Person:
Mr. Frank Welburn: Mobile (+61) 0427 686 788
Mr. Steve Reeve: Mobile (+61) 0401 642 247

1.4 Emergency telephone number
Australia Poisons Information Centre 13 11 26
New Zealand Poison Information Service 0800 POISON (0800 764 766)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
The product is classified:
GHS: Eye Dam. 1; H318 – Skin Irrit. 2; H315 – STOT SE 3; H335
Human health: Dust may irritate throat and respiratory system and cause coughing. Frequent inhalation of dust over a long period of time increase the risk of developing lung diseases. Dust or splashes from the mixture may cause permanent eye damage. Dust has an irritating effect on moist skin. Prolonged contact with wet cement/mixture may cause burns.
Environment: The product is not expected to be hazardous to the environment. In the presence of water the product hardens to a solid mass which is not biodegradable.
2.2 Label elements

**DANGER**

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
P260 Do not breathe dust.
P280 Wear protective gloves, eye and face protection.
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/attention.
P501 Dispose of contents/container in accordance with local regulations

Contains: Calcium oxide. When mixed with water it will form calcium hydroxide which has a corrosive effect on skin and eyes.

2.3 Other hazards

Other hazards Not relevant.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Mixtures

The product contains: cement

The following substances shall be indicated according to legislation:

| GHS: | %: 60-100 | CAS-No.: 65997-15-1 | EC No.: 266-043-4 | REACH Reg. No.: - | Chemical name: Portland Cement | Hazard classification: STOT SE 3;H335 Skin Irrit. 2;H315 Eye Dam. 1;H318 |

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

**Inhalation:**
Move injured person into fresh air and keep person calm under observation.
If uncomfortable: Seek hospital and bring these instructions.

**Skin contact:**
Remove contaminated clothing immediately and wash skin with soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

**Eye contact:**
Do not rub eye. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring these instructions.

**Ingestion:**
Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.
4.2 Most important symptoms and effects, both acute and delayed  
Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed  
Medical attention/treatments: Not known.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media  
Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

5.2 Special hazards arising from the substance or mixture  
Specific hazards: Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

5.3 Advice for firefighters  
Protective equipment for firefighters: Selection of respiratory protection for fire-fighting: follow the general fire precautions indicated in the workplace. In case of contact with water used for fire extinguishing, use chemical resistant protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures  
Personal precautions: Avoid inhalation of dust. Avoid contact with eyes and prolonged skin contact. Use work methods which minimize dust production.

6.2 Environmental precautions  
Environmental precautions: The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3 Methods and material for containment and cleaning up  
Methods for cleaning up: Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling  
Safe handling advice: Observe good chemical hygiene practices. Avoid spreading dust. Avoid inhalation of dust. Avoid contact with eyes and prolonged skin contact. Change contaminated clothing.

Technical measures: Use work methods which minimise dust production.

Technical precautions: Mechanical ventilation may be required. Provide easy access to water supply and eye wash facilities.

7.2. Conditions for safe storage, including any incompatibilities  
Technical measures for safe storage: No special precautions.

Storage conditions: Store in closed original container in a dry place. Seal opened containers and use up as soon as possible. When stored in humid conditions, the chromate neutralisation will decrease.
7.3. Specific end use(s)
Specific use(s): Not relevant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. Control parameters
Occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS-No.:</th>
<th>Chemical name</th>
<th>Exposure limits</th>
<th>Type</th>
<th>Notes</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1</td>
<td>Portland cement, respirable dust</td>
<td>3 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>USECHH 2000</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>Portland cement, inhalable dust</td>
<td>10 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>USECHH 2000</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of dust.
Personal protection: Personal protection equipment should be chosen in discussion with the supplier of the personal protective equipment.
Respiratory equipment: During dust-raising work: Use respiratory equipment with particle filter.
Hand protection: Wear protective gloves. Nitrile gloves are recommended. Other types of gloves can be recommended by the glove supplier.
Eye protection: Wear goggles/face shield.
Skin protection: Wear special protective clothing. Hood or helmet shall be used in connection with splashing work.
Hygiene measures: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
Environmental Exposure Controls: Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1. Information on basic physical and chemical properties
Appearance: Cement white
Odour: Odourless.
pH: Ready-to-use mixture: approx. 13
Boiling point: Not relevant.
Flash point: Not relevant.
Explosion limits: Not relevant.
Relative density: Not available.
Solubility: Miscible with water.

9.2. Other information
Other data: Not relevant.

SECTION 10: STABILITY AND REACTIVITY
10.1. Reactivity
Reactivity: None known.

10.2. Chemical stability
Stability: Stable under normal temperature conditions. The content of chromate reducing agent is gradually diminished.
10.3. Possibility of hazardous reactions
Hazardous Reactions: None known.

10.4. Conditions to avoid
Conditions/materials to avoid: The product will harden into a hard mass in contact with water and moisture.

10.5. Incompatible materials
Incompatible materials: Not known.

10.6. Hazardous decomposition products
Hazardous decomposition products: None in particular.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. Information on toxicological effects
Inhalation: Dust may irritate throat and respiratory system and cause coughing.
Skin contact: Dust has an irritating effect on moist skin. Repeated or prolonged contact with skin may cause allergic reactions in sensitive individuals.
Eye contact: Dust or splashes from the mixture may cause permanent eye damage. Immediate first aid is necessary.
Ingestion: Not likely, due to the form of the product. Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract.
Specific effects: Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

SECTION 12: ECOLOGICAL INFORMATION
12.1. Toxicity
Ecotoxicity: The product is not expected to be hazardous to the environment.

12.2. Persistence and degradability
Degradability: The product reacts with water to form a solid insoluble reaction product which is non-degradable, according to information available.

12.3. Bioaccumulative potential
Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil
Mobility: No data available.

12.5. Other adverse effects
Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS
13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste. Note that fully cured material is not considered as hazardous waste.

SECTION 14: TRANSPORT INFORMATION
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, IMDG, IATA, ...
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ADR/RID).

### 14.1. UN number
UN-No: None Allocated.

### 14.2. UN proper shipping name
Proper Shipping Name: None Allocated.

### 14.3. Transport hazard class(es)
Class: None Allocated.

### 14.4. Packing group
PG: None Allocated.

### 14.5. Environmental hazards
Marine pollutant: None Allocated.
Environmentally Hazardous substance:

### 14.6. Special precautions for user
Special precautions: None known.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Transport in bulk: Not relevant.

### SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Special provisions: As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

15.2. Chemical Safety Assessment
CSA status: Not relevant.

### SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.