SAFETY DATA SHEET

General Purpose Cement

Section 1: Identification of the Material and Supplier

Company Details

Cement Australia Pty Limited
ABN 75 104 053 474
18 Station Avenue
Darra, Queensland 4076
Tel: 1300 CEMENT (1300 236 368)
Fax: 1800 CEMENT (1800 236 368)
Website: www.cementaustralia.com.au

Emergency Contact Number:

Contact Person: Technical Manager
Telephone: 1300 CEMENT (1300 236 368 - Business Hours) or Poisons Information Centre 13 11 26

Manufacturing Plants

Gladstone: Landing Rd, Fisherman’s Landing, Gladstone QLD 4680
Brisbane: 77 Pamela St, Pinkenba QLD 4008
Railton: Cement Works Rd, Railton, TAS 7305
Port Kembla: Off Christy Rd, Port Kembla, NSW 2505

Product

Name: General Purpose Cement (Type GP)

Use: General Purpose Cement is used as a binder in concrete, concrete masonry, mortar and grouts. It is also used in the manufacture of fibre cement products, in soil stabilisation in building construction and civil engineering projects.
This SDS reflects the handling of Cement Powder in bulk or bagged form. Adding water to Cement changes the properties and the SDS for those products listed above should be referenced.
* AS3972 prescribes whether the cement conforms to these specific sub-categories.

Section 2: Hazards Identification

Classified as hazardous according to Safe Work Australia criteria. Non-dangerous Goods

Eye Irritation: Category 2A
Skin Corrosion/Irritation: Category 2
Specific Target Organ Systemic Toxicity (Single Exposure): Category 3

WARNING
The properties of Cement change when water is added. See SDS for Wet Concrete.

Hazard statement(s)

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure (skin).

For more information call 1300 CEMENT (1300 236 368) or visit www.cementaustralia.com.au

mix it with the best.
2.3 Other hazards
Some susceptible individuals may exhibit an allergic skin response upon exposure to Portland Cement, possibly due to trace amounts of chromium.
Prolonged exposure to Portland Cement in the wet form can cause serious, potentially irreversible skin or eye damage in the form of chemical burns. The same serious injury can occur if wet or moist skin or eyes have prolonged contact exposure to dry Portland Cement.

Section 3: Composition/Information on Ingredients
General Purpose Cement consists of a crystalline mass manufactured from substances mined from the earth’s crust. It contains trace amounts of naturally occurring, but potentially hazardous chemical entities including metals such as chromium and nickel. All significant constituents listed below:

<table>
<thead>
<tr>
<th>Chemical Entity</th>
<th>Proportion</th>
<th>CAS Number</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Clinker</td>
<td>&lt;97%</td>
<td>65997-15-1</td>
<td>266-043-4</td>
</tr>
<tr>
<td>Gypsum (CaSO₄.2H₂O)</td>
<td>2-5%</td>
<td>10101-41-4</td>
<td>603-783-2</td>
</tr>
<tr>
<td>Limestone (CaCO₃)</td>
<td>0-7.5%</td>
<td>1317-65-3</td>
<td>215-279-6</td>
</tr>
<tr>
<td>Calcium Oxide</td>
<td>0-1%</td>
<td>1305-78-8</td>
<td>215-138-9</td>
</tr>
<tr>
<td>Hexavalent Chromium Cr (VI)</td>
<td>&lt;10 ppm</td>
<td>18540-29-9</td>
<td></td>
</tr>
<tr>
<td>Total respirable silica</td>
<td>Below detection limits</td>
<td>14808-60-7</td>
<td></td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures
4.1 Description of first aid measures

Eye
If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation
If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin
If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion
For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

First aid facilities
Eye wash facilities and safety shower should be available.
4.2 Most important symptoms and effects, both acute and delayed
Irritating to the eyes, skin and respiratory system. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of chromium present. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).

4.3 Immediate medical attention and special treatment needed
Treat as for moderate to strong alkali and symptomatically.

---

**Section 5: Fire Fighting Measures**

<table>
<thead>
<tr>
<th>Fire/Explosion Hazard:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazchem Code:</td>
<td>None allocated</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Extinguishing Media:</td>
<td>None required</td>
</tr>
<tr>
<td>Hazards from Combustion Products:</td>
<td>None</td>
</tr>
</tbody>
</table>

**Special Protective Precautions and equipment for fire fighters:** None required

---

**Section 6: Accidental Release Measures**

**Spills:** Spills are best cleaned up by vacuum device to avoid generating airborne dust.
Recommendations on Exposure Control and Personal Protection should be followed during spill clean-up.
Keep product out of storm water and sewer drains.
Wetting during clean-up will cause formation of setting cement.

---

**Section 7: Handling and Storage**

**Handling:** When supplied in bags these need to be handled in accordance with Hazardous Manual Tasks Code of Practice.

**Storage:** Protect from moisture to prevent hardening. Storage of cement may be in concrete silos, steel bins, or plastic lined multi-ply paper bags.

---

**Section 8: Exposure Controls/Personal Protection**

**8.1 Control parameters**

**Exposure standards**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Reference</th>
<th>TWA ppm</th>
<th>STEL ppm</th>
<th>TWA mg/m³</th>
<th>STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (Limestone, Marble, Whiting)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>10</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Chromium (VI) compounds (as Cr)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Gypsum (Calcium sulphate)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>10</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Magnesium oxide (fume)</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>10</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Portland Cement</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>10</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
8.2 Exposure controls

**Engineering controls**  Avoid inhalation. Use in well-ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

**PPE**

**Eye / Face**  Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes.

**Hands**  Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.

**Body**  Wear long sleeved shirt and full-length trousers.

**Respiratory**  Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site-specific risk assessment.

---

### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>A fine powder ranging in colour from grey to off-white</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>No distinctive odour</td>
</tr>
<tr>
<td><strong>Boiling/Melting Point</strong></td>
<td>Melting point &gt;1200°C</td>
</tr>
<tr>
<td><strong>Vapour Pressure</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>3.0 – 3.2</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Non-applicable</td>
</tr>
<tr>
<td><strong>Flammability Limits</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Solubility in Water</strong></td>
<td>Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH &gt;11)</td>
</tr>
<tr>
<td><strong>Particle Size</strong></td>
<td>Up to 50% of the fresh dry material may be respirable (below 10 microns)</td>
</tr>
</tbody>
</table>

---

### Section 10: Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical Stability</strong></td>
<td>Chemically stable</td>
</tr>
<tr>
<td><strong>Conditions to Avoid</strong></td>
<td>Keep free of moisture</td>
</tr>
<tr>
<td><strong>Incompatible Materials</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Hazardous Decomposition Products</strong></td>
<td>May evolve toxic gases if heated to decomposition.</td>
</tr>
<tr>
<td><strong>Hazardous Reactions</strong></td>
<td>A corrosive substance harmful to exposed skin is the result of water addition to the point of creating a paste or slurry. See SDS for Wet Concrete.</td>
</tr>
</tbody>
</table>

---

### Section 11: Toxicological Information

**General Purpose** Cements are stable substances, compatible with most other building materials, will not decompose into hazardous by-products and do not polymerise.

**Acute toxicity**  No known toxicity data is available for this product. Based on available data, the classification criteria are not met.

**Skin**  Irritating to the skin. Contact with powder or wetted form may result in irritation, rash and dermatitis. Prolonged exposure to wet cement can cause serious, potentially irreversible skin damage in the form of chemical burns.

**Eye**  Causes serious eye damage. Contact with moisture in the eyes may result in irritation, lacrimation, pain, redness, conjunctivitis and possible alkaline burns aided by mechanical irritation and abrasion. Exposure to wet cement can cause serious, potentially irreversible eye damage in the form of chemical burns.

**Sensitisation**  Not classified as causing respiratory sensitisation. Some individuals may exhibit an allergic skin response upon exposure to cement, possibly due to trace amounts of chromium.

**Mutagenicity**  Insufficient data available to classify as a mutagen.
Section 11: Toxicological Information

Carcinogenicity

Hexavalent chromium compounds are also classified as carcinogenic to humans (IARC Group 1). However due to the trace amounts present, no adverse effects are expected due to this component. In the wet state, the likelihood of an inhalation hazard is reduced.

Reproductive

Insufficient data available to classify as a reproductive toxin.

STOT - single exposure

Irritating to the respiratory system. Over exposure may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties.

STOT - repeated exposure

In the wet state, the likelihood of an inhalation hazard is reduced.

Aspiration

This product is a solid and aspiration hazards are not expected to occur.

Section 12: Ecological Information

Ecotoxicity:

Product forms an alkaline slurry when mixed with water.

Bio accumulative potential:

This product is not expected to bioaccumulate.

Persistence and Degradability:

Product is persistent and would have a low degradability.

Mobility:

A low mobility would be expected in a landfill situation.

Section 13: Disposal Considerations

General Purpose Cement can be treated as a common waste for disposal or dumped into a landfill site, in accordance with local authority guidelines.

Keep material out of storm water and sewer drains.

Measures should be taken to prevent dust generation during disposal, and exposure and personal precautions should be observed (see above)

Section 14: Transport Information

May be transported by Ship, Rail, Air and Road.

UN Number:

None allocated

Proper Shipping Name:

None allocated

Class and Subsidiary Risk:

None allocated

Packing Group:

None allocated

Special precautions for user:

Avoid generating and breathing dust

Hazchem Code:

None allocated

Section 15: Regulatory Information

General Purpose cement is not classified as Dangerous Goods.

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS)
Section 16: Other Information

For further information on this product contact:

**Telephone:** 1300 CEMENT (1300 236 368 - Business Hours)

**Facsimile:** 1800 CEMENT (1800 236 368)

Previous Edition and edits made:

2014 – GHS Compliance edits made and supplementary compliance edits added.

2016 – Adjusting to industry guidelines released in 2018

Next Review Date for this SDS: 31 December 2024.

**Australian and New Zealand Standards:**

AS 2161: Industrial Safety Gloves and Mittens (excluding electrical and medical gloves).


AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.

AS/NZS 1716: Respiratory protective devices.

AS/NZS 4501: Occupational protective clothing.

**Advice Note:**

Cement Australia believes the information in this document to be accurate as at the date of preparation, but, to the maximum extent permitted by law, Cement Australia accepts no responsibility for any loss or damage caused by any person acting or refraining from action because of this information.

The provision of this information should not be construed by anyone as a recommendation to use this product. No one should use any product in violation of any patent or other intellectual proprietary rights or in breach of any statute or regulation.

Users should rely on their own knowledge and inquiries and make their own determination as to the applicability of this information in relation to their particular purposes and specific circumstances. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.

[End SDS]