



FRONTIER CEMENT SUPPLIES  
Safety Data Sheet

Product Name: Portland & Blended Cement.

1. Identification of the Material and Supplier

<b>Supplier Name:</b>	<b>Frontier Cement Supplies</b>
<b>Address (Head Office)</b>	8 Gilbert Street PORT HEDLAND WA 6721
<b>Telephone</b>	(08) 9173 2956 A/Hrs 0400 512 461
<b>Fax</b>	(08) 9173 2956
<b>Emergency</b>	<b>13 11 26</b> (Poisons Information Centre)
<b>Email</b>	<a href="mailto:kodee@frontiercement.com.au">kodee@frontiercement.com.au</a>
<b>Product Name:</b>	<b>Portland Cement</b>
<b>Synonym(s)</b>	Blended Cement . General Purpose Cement . Type GP .
<b>Use(s)</b>	Cement . Concrete . Grout . Masonary . Mortar . Soil Stabilisation

2. Hazards Identification

**CLASSIFIED AS HAZARDOUS ACCORDING TO WORKSAFE AUSTRALIA CRITERIA**

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S22 Do Not Breathe Dust.  
S24/25 Avoid Contact with Skin and Eyes.

### 3. Composition/Information on Ingredients

Portland cement consists of a crystalline mass manufactured from substances mined from the earth's crust. It contains recordable amounts of naturally occurring, but potentially hazardous chemical entities including heavy metals such as chromium, nickel and crystalline silica. Major constituents are listed below.

<b>Chemical Entity</b>	<b>Proportion</b>	<b>CAS Number</b>
Portland Cement / Clinker	<97%	65997-15-1
Gypsum	2-5%	10101-41-4
Limestone	0-7.5%	1317-65-3
Hexavalent Chromium	<1%	1333-82-0
Crystalline Silica (Quartz)	<1%	14808-60-7

### 4. First Aid Measures

**Eyes:** 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.

**Swallowed:** Rinse mouth, and lips with water. Do not induce vomiting. Give water to drink to dilute stomach contents. If symptoms persist, seek medical attention.

**Skin:** If skin or hair occurs, remove contaminated clothing and flush skin and hair with running water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent irritation or burning of the skin.

**Inhaled:** Remove to fresh air, away from dusty area. If symptoms persist, seek medical advice.

**First Aid Facilities:** Eye Wash Station and Emergency Shower are recommended.

**Advice to Doctor:** Treat symptomatically.

### 5. Fire Fighting Measures

**Fire/Explosion Hazard:** None  
**Hazchem Code:** None Allocated  
**Flammability:** Not Flammable  
**Extinguishing Media:** None Required  
**Advice for Firefighters:** No Fire or Explosion Hazard Exists

## 6. Accidental Release Measures

**Spills:** Spills are best cleaned up by vacuum device to avoid generating airborne dust.  
Wear Personal Protective Equipment as per section 8 of SDS.  
Prevent product from entering storm water and sewer drains.  
Refer section 13 for appropriate disposal methods.

## 7. Storage and Handling

**Storage:** Store in a cool, dry well ventilated area, removed from moisture, incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

**Handling:** Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

## 8. Exposure Controls / Personal Protection

**Exposure Limits:** Exposure to dust should be kept as low as practicable, and below the following OES.  
Portland Cement: 10mg/m<sup>3</sup> TWA (time weighted average) as inspirable dust.

Crystalline silica (quartz): 0.1mg/m<sup>3</sup> TWA as respirable dust (<7microns particle equivalent aerodynamic diameter)

Chromium VL (hexavalent): 0.05mg/m<sup>3</sup>- sensitiser

**Engineering Controls:** All work with dry cement should be carried out in such a way as to minimise dust generation, exposure to dust and repeated or extended skin contact. When handling dry cement, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. For bulk deliveries, closed pumping systems are recommended. For handling of individual bags, follow instructions below if no local exhaust ventilation is available. Work methods and engineering should aim to minimise contact with wet cement onto exposed skin. Work areas should be cleaned regularly.

### Personal Protection

**Skin:** Minimise contact with Portland Cement materials. When handling dry or wet cement, wet concrete, mortar or grout, personnel should wear protective clothing and impervious footwear, and

gloves such as PVC. Never kneel in wet cement, or allow extended contact of skin with wet cement.

- Eyes:** Splash resistant Safety Glasses with side shields or safety glasses (AS/NZ 1336) or a face shield should be worn to ensure all contact with eyes is avoided.
- Respiratory:** Where engineering and handling controls are not adequate to minimise exposure to total dust and to respirable crystalline silica wear a suitable P1 or P2 particulate respirator (AS/NZS 1715 & AS/NZS (1716).
- Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly.
- For dust levels approaching or exceeding the NES (see above) a more Effective particulate respirator as described in AS/NZS 1715 should be worn.
- Procedures for effective use of respirators should be applied and supervised.

## 9. Physical and Chemical Properties

- Appearance:** Fine powder ranging in colour from grey to off-white.
- Odour:** No distinct odour.
- Boiling/Melting Point:** Melting point > 1200 degrees Celsius.
- Vapour Pressure:** Not Applicable.
- Specific Gravity:** 3.0 – 3.2
- Flash Point:** Non Applicable.
- Flammability Limits:** Not Applicable.
- Solubility in Water:** Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH>11)
- Particle Size:** Up to 50% of the fresh dry material may be respirable (below 10 microns)

## 10. Stability and Reactivity

- Chemical Stability:** Chemically stable.
- Conditions to Avoid:** Keep free of moisture.
- Incompatible Materials:** None.
- Hazardous Reactions:** None.

## 11. Toxicological Information

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

- Health Hazard Summary:** Slightly corrosive – irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices

to avoid eye or skin contact and inhalation. Once water is added an inhalation hazard is not anticipated. Chronic respiratory effects are not anticipated with over exposure at high levels due to the immediate irritant and/or corrosive effects. Hexavalent chromium compounds may be present in trace amounts in cement products and are classified as carcinogenic to humans (IARC Group1)

- Eye:** Corrosive – irritant. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage. Severe irritant upon contact with powder/dust.
- Inhalation:** Slightly corrosive – irritant. Over exposure to dust may result in severe mucous membrane irritation of nose and throat, coughing and bronchitis. Chromium compounds have been reported to cause respiratory sensitisation and may be present as a contaminant of cement. However, given the low level present, over exposure is not anticipated.
- Skin:** Slightly corrosive. Contact with powder or wetted form may result in rash and dermatitis. Some individuals may exhibit an allergic response upon exposure to cement, possibly due to trace amounts of chromium.
- Ingestion:** Slightly corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting and abdominal pain. Ingestion is considered unlikely due to product form.

## 12. Ecological Information

**Toxicity:** May be harmful to the aquatic environment due to the alkaline nature of the product. This product is non-toxic to aquatic organisms when present as a cured solid.

**Bio accumulative Potential:** This product is not expected to bio accumulate.

**Mobility in Soil:** A low mobility would be expected in a landfill situation.

## 13. Disposal Considerations

**Waste disposal:** Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site.

**Legislation:** Dispose of in accordance with relevant local legislation.

## 14. Transport Information

*NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE.*

Transportation is done in bulk or bag form by Ship, Rail and Road.



**UN Number:** None Allocated  
**Proper Shipping Name:** None Allocated  
**Class & Subsidiary Risk:** None Allocated  
**Packing Group:** None Allocated  
**Special precautions for user:** None Allocated  
**Hazchem Code:** None Allocated

## 15. Regulatory Information

**Poison Schedule:** A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Inventory Listings:** *AUSTRALIA: AICS (Australian Inventory of Chemical Substances)*  
All components are listed on AICS, or are exempt.

## 16. Other Information

**Additional information:** Personal Protective Equipment Guidelines:  
The recommendation for protective equipment contained within this report is provided as a guide only. A risk assessment should be conducted for each individual application to determine final selection of appropriate personal protective equipment.

**Additional Information:** Health Effects from Exposure:  
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to cover all possible scenarios it is anticipated that individual product users will assess the risks and apply control methods where appropriate as per their individual circumstances.

**Advice Note:**  
Frontier Cement Supplies believes the information in this document to be accurate as at the date of preparation noted below, but, to the maximum extent permitted by law, Frontier Cement Supplies 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. Information is supplied as "safety data" relevant to the product.

Users should rely on their own knowledge and research to determine the applicability of this information in relation to their particular purposes and specific circumstances. Each individual user should read this SDS 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.

