1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: PORTLAND CEMENT
Supplier Contact: Cockburn Cement A.B.N. 50.008.673.470
Address: PO Box 38, Hamilton Hill, WA 6963
Manufacturing: Munster Works, Lot 242, Russell Road East, Munster WA 6166
Plant(s): Kwinana Works, Leath Road, Kwinana WA 6167
Telephone: 08 9411 1000
Fax: 08 9411 1150
Emergency: Bus Hrs 08 9411 1000 A/Hrs 08 9411 1000
Email: orders@cockburncement.com.au

Synonym(s): Type General Purpose (GP), High Early Strength (HE), Brightonlite Cream Cement, Cockburn Crème High Early Strength (CCH), Cockburn Crème General Purpose (CCGP), General Purpose Coarse (GPC), Type Sulphate Resistant (SR)

Use(s): CONCRETE • BINDING AGENT • GROUT • MORTAR • RENDER • MASONRY CONSTRUCTION

2. HAZARDS IDENTIFICATION

This product is classified as hazardous according to Safe Work Australia criteria. Not classified as a dangerous good by the criteria of the ADG code, IMDG or IATA.

GHS Classifications
Skin Corrosion/Irritation: Category 2
Serious Eye Damage / Eye Irritation: Category 1
Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

SIGNAL WORD: DANGER

Pictograms

Hazard statements
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H373 May cause damage to lungs and respiratory tract through prolonged or repeated exposure.

Prevention statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statements
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Disposal statements
P501 Dispose of contents/container in accordance with relevant regulations.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Formula</th>
<th>Conc.</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORTLAND CEMENT CLINKER</td>
<td>Not Available</td>
<td>&lt; 90%</td>
<td>65997-15-1</td>
</tr>
<tr>
<td>*GYPSUM</td>
<td>CaSO₄ 2H₂O</td>
<td>3 - 8%</td>
<td>10101-41-4</td>
</tr>
<tr>
<td>*LIMESTONE</td>
<td>CaCO₃</td>
<td>0 - 5%</td>
<td>1317-65-3</td>
</tr>
<tr>
<td>*GRANULATED BLAST FURNACE SLAG</td>
<td>Not Available</td>
<td>0 - 5%</td>
<td>65996-69-2</td>
</tr>
<tr>
<td>CHROMIUM (VI) HEXAVALENT</td>
<td>Cr⁶⁺</td>
<td>Trace</td>
<td>18540-29-9</td>
</tr>
</tbody>
</table>

*NOTE: Ingredient may contain crystalline silica (CAS No. 14808-60-7).

4. FIRST AID MEASURES

**Eye**
Flush thoroughly with flowing water for at least 15 minutes and seek medical attention if symptoms persist. If wet cement is splashed into the eyes flush thoroughly with flowing water for 15 minutes and seek urgent medical attention.

**Inhalation**
Remove from dusty area to fresh air. If symptoms persist, seek medical attention.

**Skin**
Remove heavily contaminated clothing immediately. Wash off skin thoroughly with water. A shower may be required. Seek medical attention for persistent irritation or burning of the skin.

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

**Advice to Doctor**
Treat symptomatically.

**First Aid Facilities**
Eye wash station.

**Additional Information - Aggravated Medical Conditions**

**Inhalation**
Over exposure resulting from prolonged and repeated inhalation of dust containing crystalline silica can cause bronchitis, silicosis (scarring of the lung.) It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs) and lung cancer. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scaring of the lung) and lung cancer in persons exposed to crystalline silica.

**Skin**
Prolonged and repeated skin contact with cement in wet concrete, mortars and slurries may result in irritant dermatitis.

**Eye**
Irritating to the eye. If wet cement is splashed into the eye alkaline burns can cause permanent damage.

5. FIRE FIGHTING

**Flammability**
Non flammable. Does not support combustion of other materials.

**Fire and Explosion**
No fire or explosion hazard exists.

**Extinguishing**
Non flammable; use suitable extinguishing agent for surrounding fire.

**Hazchem Code**
None.
6. ACCIDENTAL RELEASE MEASURES

**Spillage**
If spilt (bulk), contact emergency services if appropriate. Wear dust-proof goggles, PVC/rubber gloves, a Class P2 respirator (where an inhalation risk exists), coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating dust.

**Emergency Procedures**
Follow safety requirements for personal protection under Section 8 Exposure Controls/Personal Protection.

7. HANDLING AND STORAGE

**Storage**
Store off the floor in the original bags in a cool, dry, well ventilated area, removed from excessive moisture and heat. 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.

**Property/Environmental**
Refer to Section 13.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation**
Do not inhale dust/powder. Use with adequate ventilation. Where a dust inhalation hazard exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

**Exposure Standards**
- CALCIUM CARBONATE (1317-65-3)
  - ES-TWA: 10 mg/m³ (Respirable Dust)
- CHROMIUM (VI) HEXAVALENT (18540-29-9)
  - ES-TWA: 0.05 mg/m³ (Chromium VI compounds)
- GYPSUM (10101-41-4)
  - ES-TWA: 10 mg/m³ (Respirable Dust)
- PORTLAND CEMENT (65997-15-1)
  - ES-TWA: 10 mg/m³ (Respirable Dust)
- SILICA, CRYSTALLINE – QUARTZ (14808-60-7)
  - ES-TWA: 0.1 mg/m³ (Respirable Dust)

**PPE**
Wear dust-proof goggles and rubber or PVC gloves. Where an inhalation risk exists, wear a Class P2 respirator. If there is potential for prolonged and/or excessive skin contact, wear coveralls. At high dust levels, wear a Class P3 respirator or a Powered Air Purifying Respirator (PAPR) with Class P3 filter.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fine powder ranging in colour from grey to off-white</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>pH</td>
<td>Approximately 12 (Alkaline)</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Not Available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>&gt; 1200°C</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Slight, hardens on mixing with water</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.5 to 3.2</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non Flammable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Relevant</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>Not Relevant</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>Not Relevant</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>1000 - 1600 kg/m³</td>
</tr>
<tr>
<td>Particle Size</td>
<td>10 - 30% of particles are &lt; 7 μm, ie in the respirable range</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Chemically Stable</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Keep free of moisture</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Incompatible with oxidising agents (eg hypochlorites), ethanol, acids (eg hydrofluoric acid) and interhalogens (eg chlorine trifluoride). Water contact may increase product</td>
</tr>
<tr>
<td>Decomposition Products</td>
<td>Unlikely to evolve toxic gases when heated to decomposition.</td>
</tr>
<tr>
<td>Hazardous Reactions</td>
<td>None</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>No known toxicity data available for this product.</td>
</tr>
<tr>
<td>Eye</td>
<td>Irritant upon contact with powder/dust. Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Slightly corrosive. Irritating to the respiratory system, causing coughing and sneezing. Over exposure may result in severe mucous membrane irritation and bronchitis. Hexavalent chromium is reported to cause respiratory sensitisation, however due to the trace amount present, a hazard is not anticipated under normal conditions of use. Crystalline silica can cause silicosis (lung disease) with chronic over exposure, however due to low levels present and product application, adverse health effects are not anticipated.</td>
</tr>
<tr>
<td>Skin</td>
<td>Irritating to the skin. Prolonged and repeated contact with powder or wetted form may result in skin rash, dermatitis and sensitisation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Slightly corrosive. Ingestion may result in burns to the mouth and throat, with vomiting and abdominal pain. Due to product form, ingestion is not considered a likely exposure route.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Insufficient data available for this product to classify as a mutagen.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Portland Cement is not classified as a carcinogen by NOHSC. Crystalline silica and hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1), however due to low levels present and product application, the criteria for classification is not met.</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

Toxicity
Product forms an alkaline slurry when mixed with water. This product is non toxic to aquatic life forms when present in cured solid form.

Persistence & Degradability
Product is persistent and would have a low degradability.

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. Contact the manufacturer for additional information.

Legislation
Dispose of in accordance with relevant local legislation. Keep out of sewer and stormwater drains.

14. TRANSPORT INFORMATION

Not classified as a dangerous good by the criteria of the ADG Code.

Transport is by rail or road in bulk or bag form.

Drivers of trucks transporting bagged product should ensure that the bags are properly restrained.

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 Drugs and Poisons (SUSDP).

AICS
All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information
CEMENT CONTACT DERMATITIS: Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitisation. The dermatitis is due to the presence of soluble (hexavalent) chromium.

IARC – GROUP 1 – PROVEN HUMAN CARCINOGEN. This product contains an ingredient for which there is sufficient evidence to have been classified by the International Agency for Research into Cancer as a human carcinogen. The use of products known to be human carcinogens should be strictly monitored and controlled.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.
PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The Recommendation for protective 
equipment contained within this SDS report is provided as a guide only. Factors such as 
method of application, working environment, quantity used, product concentration and the 
availability of engineering controls should be considered before final selection of personal 
protective equipment is made.

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 prepare an SDS report which would 
encumber all possible scenarios, it is anticipated that users will assess the risks and apply 
control methods where appropriate.

ABBREVIATIONS: 
mg/m³ - Milligrams per cubic metre
ppm - Parts Per Million
ES-TWA - Exposure Standard - Time Weighted Average
CNS - Central Nervous System
NOS - Not Otherwise Specified
pH - relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, 
where 0 is highly acidic and 14 is highly alkaline.
CAS# - Chemical Abstract Service Number - used to uniquely identify chemical 
compounds.
IARC - International Agency for Research on Cancer.

Report Status 
This document has been compiled by Cockburn Cement the manufacturer of the product 
and serves as the manufacturer’s Safety Data Sheet (“SDS”).

While Cockburn Cement has taken all due care to include accurate and up-to-date 
information in this SDS, it does not provide any warranty as to accuracy or completeness. 
As far as lawfully possible, Cockburn Cement accepts no liability for any loss, injury or 
damage (including consequential loss) which may be suffered or incurred by any person as 
a consequence of their reliance on the information contained in this SDS.

Contact Point 
For further information on this product contact:

Telephone: Office hours 08 9411 1000
After hours 08 9411 1000
Facsimile: 08 9411 1150

Advice Note 
The information in this document is believed to be accurate. Please check the currency of 
this SDS by contacting:

08 9411 1000
or

The provision of this information should not be construed as a recommendation to use this 
product in violation of any patent rights or in breach of any statute or regulation. Users 
are advised to make their own determination as to the suitability of this information in 
relation to their particular purposes and specific circumstances. Users 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.