



# Material Safety Data Sheet (MSDS)

## MSDS No. PP001

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Issue Date: 28 July, 2004  
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### SAND and CEMENT MIX

#### Section 1: MATERIAL & SUPPLIER IDENTIFICATION

**Product Name:** Sand and Cement Mix  
**Other Names:** None  
**Manufacturer's Product Code:** 033506 – 40 kg, 033345 – 40 kg, 033338 – 30 kg, 033365 – 20 kg, 816967 – 10 kg, 816917 – 10 kg, 816942 – 5 kg, 816900 – 5 kg  
**Use:** As a mortar for laying bricks and blocks, producing mortar (with lime), rendering surfaces  
**Supplier Name:** Cement Australia  
**Supplier Phone:** Sales (03) 9688 1990

**Emergency:** **1800 339942**

#### Section 2: HAZARDS IDENTIFICATION

##### **HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS**

(Classified according to the criteria of WORKSAFE Australia)

##### **Risk Phrases**

R36/37/38: Irritating to eyes, respiratory system and skin  
R40: Possible risk of irreversible effects  
R43: May cause sensitisation by skin contact  
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation

##### **Safety Phrases**

S22: Do not breathe dust  
S24/25: Avoid contact with skin and eyes  
S36/37: Wear suitable protective clothing and gloves

#### Section 3: COMPOSITION / INGREDIENT INFORMATION

<u>Ingredients</u>	<u>CAS Number</u>	<u>Proportion</u>
Portland cement	65997-15-1	18 - 22%
Washed sand	14808-60-7	75 - 80%
Hexavalent chromium [Cr(VI)] (water soluble)	1333-82-0	< 20 ppm
Crystalline silica [in GP cement]	14808-60-7	0.1 – 0.3%

## **SAND and CEMENT MIX**

### **Section 4: FIRST AID MEASURES**

#### **SWALLOWED**

**Health Effects:** Is mildly abrasive and corrosive and may cause nausea/stomach cramps/constipation

**First Aid:** Rinse mouth with milk or water. DO NOT give carbonated (fizzy) drinks.

DO NOT induce vomiting. After rinsing the mouth, give milk or water to drink.

If symptoms persist, seek medical attention.

#### **EYE**

**Health Effects:** Wet sand and cement is irritating and may be abrasive to the eyes.

**First Aid:** Flush eyes with tepid running water for at least 15 minutes, removing any foreign bodies. Seek medical attention, if symptoms persist.

#### **SKIN**

**Health Effects:** Wet mortar is irritating and corrosive to skin and may cause skin sensitisation (dermatitis). There may be a trace of water soluble hexavalent chromium present in Portland Cement which may cause allergic dermatitis in some individuals.

**First Aid:** Wash with tepid soapy water; shower if necessary.

#### **INHALED**

**Health Effects:** Repeated inhalation of the dust may cause bronchitis, silicosis and lung cancer.

**First Aid:** Remove from area. Keep at rest. Seek medical advice if symptoms persist.

### **CHRONIC HEALTH EFFECTS**

Repeated inhalation of dust containing crystalline silica can cause bronchitis, silicosis (scarring of the lung) and lung cancer. It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs). The International Agency for Research on Cancer (IARC) states: "*Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)*".

### **ADVICE TO DOCTOR**

Treat symptomatically

### **AGGRAVATED MEDICAL CONDITIONS CAUSED BY EXPOSURE**

Studies have shown that smoking increases the risk of bronchitis, silicosis and lung cancer in persons exposed to crystalline silica.

### **Section 5: FIRE FIGHTING MEASURES**

**HAZCHEM CODE:** None allocated

**FLAMMABILITY:** Not flammable

**EXTINGUISHING MEDIA:** Not flammable

**HAZARDS FROM COMBUSTION PRODUCTS:** Not flammable

**SPECIAL PROTECTIVE PRECAUTIONS & EQUIPMENT FOR FIRE FIGHTERS:** None

## **SAND and CEMENT MIX**

### **Section 6: ACCIDENTAL RELEASE MEASURES**

- EMERGENCY PROCEDURES:** Avoid generating and breathing dust. If dust is generated, wear a class P<sub>1</sub> or P<sub>2</sub> particulate respirator (AS/NZS 1715, 1716).
- CONTAINMENT PROCEDURES:** Product is a dense powder which will generally remain within the release zone.
- CLEAN-UP PROCEDURES:** Follow safety requirements for personal skin, eye and respiratory protection. Spills should be cleared by any dry method such as broom, shovel or vacuum taking care to minimise dust generation.

### **Section 7: HANDLING AND STORAGE**

- PRECAUTIONS FOR SAFE HANDLING:** It is recommended that all manual handling of this bag be undertaken by load shifting equipment. Manual Handling of this product is not recommended as this may result in personal injury. If no mechanical aids are available, you must not lift this item unless you share the load with 2 or more persons for weights up to 20 kilograms and 3 or more persons for weights up to 40 kilograms. For weights greater than 40 kilograms, mechanical aids for load shifting must be used. Prior to manual handling, it is recommended that a manual handling risk assessment be undertaken.
- Personal safety requirements are outlined in Section 8.
- CONDITIONS FOR SAFE STORAGE:** Keep dry at all times. Keep in moisture-proof containers/silos to prevent hardening. Concrete or steel bins and silos or plastic lined paper sacks are recommended forms of storage.
- INCOMPATIBILITIES:** Segregate from strong acids

### **Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION**

- NATIONAL EXPOSURE STANDARDS:** Worksafe Australia Exposure Standard

Total dust, containing no asbestos and <1% crystalline silica, Threshold-Limit-Value (TLV) Time weighted-Average (TWA) 10 mg/m<sup>3</sup> measured as inspirable dust.

Crystalline silica (quartz): 0.2 mg/m<sup>3</sup> TWA as respirable dust ( $\leq$  7 micron particle equivalent aerodynamic diameter).

Respirable crystalline silica (quartz) exposure levels should be kept below the Cement Australia upper threshold limit of 0.05 mg/m<sup>3</sup> TWA.

However, where a State or Territory prescribes a lower exposure standard, the lower exposure standard applies.

- BIOLOGICAL LIMIT VALUES:** None stated
- ENGINEERING CONTROLS:** Avoid generating dust. Where dust could be generated, use local mechanical ventilation or extraction in areas where dust could escape into the work environment.

## SAND and CEMENT MIX

### PERSONAL PROTECTIVE EQUIPMENT:

- SKIN** Wear loose comfortable protective clothing and impervious boots. Apply barrier cream to hands or wear gloves (AS/NZS 2161). Wash thoroughly after handling. Wash clothes regularly and keep separate from other clothes.
- EYES** Safety spectacles with side shields or safety goggles (dust resistant AS/NZS 1336) should be worn if dust is likely to be generated.
- RESPIRATORY** None required if engineering controls are adequate. If dust is generated, wear a class P<sub>1</sub> or P<sub>2</sub> particulate respirator (AS/NZS 1715/1716). Note that persons with facial hair will have difficulty in obtaining a satisfactory face seal. For alternatives, refer AS/NZS 1715.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Grey sand textured powder		
<b>Odour:</b>	No odour		
<b>pH:</b>	Not applicable	<b>Specific Gravity/Density:</b>	2.14
<b>Boiling Point/Range:</b>	Very high temp.	<b>Freezing/Melting Point:</b>	Very high temp. (> 1200°C)
<b>Vapour Density:</b>	Nil	<b>Vapour Pressure:</b>	Not applicable
<b>Solubility:</b>	Some components slightly soluble in water forming an alkaline (caustic) product (pH 11+)		
<b>Flash Point:</b>	Not applicable		
<b>Ignition Temperature:</b>	Not applicable		
<b>UFL:</b>	Not applicable		
<b>LFL:</b>	Not applicable		
<b>Additional Information</b>	No additional relevant information		

### Section 10: STABILITY & REACTIVITY

<b>Chemical Stability:</b>	Chemically stable
<b>Conditions to Avoid:</b>	Avoid moisture to prevent hardening
<b>Incompatible Materials:</b>	None
<b>Hazardous Decomposition Products:</b>	None
<b>Hazardous Reactions:</b>	Avoid reaction with hydrogen fluoride (hydrofluoric acid) and other fluorine containing compounds

### Section 11: TOXOLOGICAL INFORMATION

**Health effects from the likely routes of exposure:** Refer Section 4: FIRST AID MEASURES



## SAND and CEMENT MIX

### Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Product may be eco damaging as it can form an alkaline slurry with water

**Persistence & Degradability:** Product would be persistent and have a low degradability

**Mobility:** A low mobility would be expected in a landfill setting

### Section 13: DISPOSAL CONSIDERATIONS

**Disposal Methods & Containers:** Follow safety requirements indicated in Section 6. Collect in containers and dispose as trade waste in accordance with local authority guidelines.

**Special considerations for landfill or incineration:** Avoid generating dust during disposal

### Section 14: TRANSPORT INFORMATION

**UN Number:** None allocated

**UN Proper Shipping Name:** None allocated

**Class & Subsidiary Risk:** None applicable

**Packaging Group:** None allocated

**Special Precautions for Use:** Avoid generating and breathing dust

**Hazchem Code:** None allocated

### Section 15: REGULATORY INFORMATION

**Australian Legislation:** Hazardous according to Worksafe Australia criteria

### Section 16: OTHER INFORMATION

**Date of preparation or last revision of MSDS**

Prepared in accordance with the National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011(2003)]

End of Report