

## SAFETY DATA SHEET

## PROSTRENGTH Rapid Set Concrete

## 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

Brisbane: 77 Pamela St, Pinkenba QLD 4008

Auburn: Highgate Street, Auburn NSW 2144

## Product

Name: PROSTRENGTH Rapid Set Concrete

Other Names: --

Use: PROSTRENGTH Rapid Set Concrete is used to produce concrete requiring high early strength applications.

## Section 2: Hazards Identification

## Hazardous Substance. Non-dangerous Goods

A low proportion of the fine dust in the supplied dry product will be respirable crystalline silica. Once wetted, in the wet or final set form, risk of any airborne respirable dust will be low, but dry residues, or dust from cutting, grinding, abrading, or finishing the set product may contain respirable crystalline silica.

- GHS classifications** Skin Corrosion/Irritation: Category 2
- Serious Eye Damage / Eye Irritation: Category 1
- Specific Target Organ Systemic Toxicity (Single Exposure): Category 3
- Carcinogenicity: Category 1A
- Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

For more information call 1300 CEMENT (1300 236 368)  
or visit [www.cementaustralia.com.au](http://www.cementaustralia.com.au)*Mix it with the best.*

## 2.2 GHS Label elements



### Signal word: DANGER

H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

### Prevention statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area.
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.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment is advised - see first aid instructions.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before re-use.

### Storage statements

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

### Disposal statements

P501	Dispose of contents/container in accordance with relevant regulations.
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## 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

The sand in this product is mainly crystalline silica and accounts for the high overall crystalline silica content. All significant constituents are listed below:

Chemical Entity	Proportion	CAS Number
<u>Cement General Purpose or Blended containing:</u>	15-30%	65997-15-1
Hexavalent Chromium Cr (VI)	<14 ppm	1333-82-0
<u>Washed Sand containing:</u>	25-40%	
Crystalline Silica (Quartz) (in Sand)	0-3%	14808-60-7
Hexavalent Chromium Cr (VI) (in Sand and aggregate)	<20 ppm	1333-82-0
<u>Washed aggregate</u>	35-55%	
Calcium Formate	<1%	544-17-2

## Section 4: First Aid Measures

<b>Swallowed:</b>	Rinse mouth and lips with water. Do not induce vomiting. Give water to drink to dilute stomach contents. If symptoms persist, seek medical attention.
<b>Eyes:</b>	Flush thoroughly with flowing water. If symptoms such as irritation or redness persist, seek medical attention.
<b>Skin:</b>	Wash off skin thoroughly with soap and water. Shower if necessary. Seek medical attention for persistent irritation or burning of the skin.
<b>Inhaled:</b>	Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.
<b>First Aid Facilities:</b>	Eye wash station. Washing facilities with running water.
<b>Advice to Doctor:</b>	Treat symptomatically. Wet cement burns to skin or eye may result in corrosive caustic burns. Ingestion of significant amounts of cement dry or wet is unlikely. Do not induce emesis or perform gastric lavage. Neutralization with acidic agents is not advised because of increased risks of exothermic burns. Water-mineral oil soaks may aid in removing hardened cement from the skin. Ophthalmological opinion should be sought for ocular burns.

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## Section 5: Fire Fighting Measures

<b>Fire/Explosion Hazard:</b>	None
<b>Hazchem Code:</b>	None allocated
<b>Flammability:</b>	Not flammable
<b>Extinguishing Media:</b>	None required
<b>Hazards from Combustion Products:</b>	None
<b>Special Protective Precautions and equipment for fire fighters:</b>	None required

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## Section 6: Accidental Release Measures

<b>Spills:</b>	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.
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## Section 7: Handling and Storage

<b>Handling:</b>	When supplied in bags these need to be handled in accordance with manual handling Code of Practice.
<b>Storage:</b>	Protect from moisture to prevent hardening. Storage of cement may be in concrete silos, steel bins, or plastic lined multi-ply paper bags.

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## Section 8: Exposure Controls/Personal Protection

### 8.1 Exposure control measures

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Chromium (VI) compounds (as Cr)	SWA (AUS)	--	0.05	--	--
Portland Cement	SWA (AUS)	--	10	--	--
Quartz (respirable silica)	SWA (AUS)	--	0.05	--	--

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Engineering controls

Use outdoors or in well-ventilated areas. Employ natural or mechanical ventilation to maintain exposure within applicable limits. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

### 8.3 Individual protection measures

**Eyes and face protection:** Safety glasses with side shields or protective goggles should be worn while using this product. For extremely dusty conditions, non-vented goggles or goggles with indirect venting are recommended. Avoid contact lens wear when using this product.

**Skin protection:** Long sleeved shirts and trousers should be worn while using this material. Avoid direct contact with skin. If working in dusty conditions, impervious over garments are recommended. Protective gloves with wrist/arm cuffs should be worn to avoid direct contact with skin. Wear PVC, rubber, or cotton gloves when handling material to prevent skin contact.

**Respiratory protection:** If exposure levels cannot be maintained below acceptable limits, suitable particulate-filtering facemasks or respirators approved by MSHA/NIOSH should be worn in accordance with the user's respiratory protection program and OSHA/MSHA guidelines. Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site-specific risk assessment. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly.

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## Section 9: Physical and Chemical Properties

<b>Appearance:</b>	A grey sandy mixture of fine and coarse (14mm) solid particles.
<b>Odour:</b>	No distinctive odour
<b>Boiling/Melting Point:</b>	Melting point >1200°C
<b>Vapour Pressure:</b>	Not applicable
<b>Specific Gravity:</b>	2.75
<b>Flash Point:</b>	Not applicable
<b>Flammability Limits:</b>	Not applicable
<b>Solubility In Water:</b>	Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH >11)
<b>Particle Size:</b>	Up to 50% of the fresh dry material may be respirable (below 10 microns)

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## Section 10: Stability and Reactivity

PROSTRENGTH Rapid Set Concrete is stable, compatible with most other building materials, will not decompose into hazardous by-products and does not polymerise.

<b>Chemical Stability:</b>	Chemically stable
<b>Conditions to Avoid:</b>	Keep free of moisture during storage
<b>Incompatible Materials:</b>	None
<b>Hazardous Decomposition Products:</b>	None
<b>Hazardous Reactions:</b>	None

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## 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.

There is no direct toxicological data on this product. Health effects information is based on reported effects in use from overseas and Australian reports on mixtures of Portland Cements and sand.

### 11.1 Early onset symptoms related to exposure.

**INGESTION/SWALLOWING:** Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.

**INHALATION:** 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. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

**EYE EXPOSURE:** Causes serious eye damage. Irritating and corrosive to the eyes and may cause alkaline burns. Cement dust is irritating to the eyes. Exposure to dust may aggravate existing eye irritations. Contact with moisture in the eyes may result in irritation, flow of tears, 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.

**SKIN EXPOSURE:** Irritating to the skin. Direct 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. Within 12 to 48 hours (after one- to six-hour exposures) possible first, second- or third-degree burns may occur. There may be no obvious pain at the time of the exposure. Chronic skin disorders may be aggravated by exposure to dust or contact with product.

### 11.2 Delayed health effects from exposure.

**INGESTION/SWALLOWING:** Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.

**INHALATION:** Repeated exposure to the dust may result in increased nasal and respiratory secretions and coughing. Inflammation of lining tissue of the respiratory system may follow repeated exposure to high levels of dust, with increased risk of bronchitis and pneumonia.

Repeated exposure to respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibronodular lung disease caused by deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness. In the wet state, the likelihood of an inhalation hazard is reduced.

**EYE EXPOSURE:** Dust may cause irritation and inflammation of the cornea.

**SKIN EXPOSURE:** Repeated contact causes irritation and drying of the skin and can result in skin reddening and skin rash (dermatitis). Over time this may become chronic and can also become infected. Persons who are allergic to chromium may develop an allergic dermatitis which aggravates the irritant effects, and this combination can lead to chronic cement dermatitis and serious disability particularly affecting the hands.

**CARCINOGENICITY:** This product contains crystalline silica which is classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore, preventing the onset of silicosis will also reduce the cancer risk. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scarring of the lung) and lung cancer in persons exposed to respirable crystalline silica.

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.

Components	Toxicity	Carc: IARC	Carc: NTP	Carc: OSHA
Crystalline Silica (Quartz)	Oral LD50 Rat >22,500 mg/kg LC50 Carp >10,000 mg/L (72 h)	Group 1	Known	Not listed

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Product forms an alkaline slurry when mixed with water.
<b>Persistence and Degradability:</b>	Product is persistent and would have a low degradability.
<b>Mobility:</b>	A low mobility would be expected in a landfill situation.

## Section 13: Disposal Considerations

Follow personal protection safety requirements. Collect in containers and dispose as trade waste and land fill in accordance with local authority guidelines. Keep out of stormwater and sewer drains.

## Section 14: Transport Information

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

<b>UN Number:</b>	None allocated
<b>Proper Shipping Name:</b>	None allocated
<b>Class and Subsidiary Risk:</b>	None allocated
<b>Packing Group:</b>	None allocated
<b>Special precautions for user:</b>	Avoid generating and breathing dust
<b>Hazchem Code:</b>	None allocated

## Section 15: Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

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).

## Section 16: Other Information

<b>For further information on this product contact:</b>	<b>Telephone:</b> 1300 CEMENT (1300 236 368 - Business Hours) <b>Facsimile:</b> 1800 CEMENT (1800 236 368)
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Next Review Date for this MSDS: 31 December 2024.

## Australian and New Zealand Standards:

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

AS/NZ 1336: Recommended Practices for Occupational Eye Protection.

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 noted below, 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. In particular, 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 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.

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[End SDS]