

SAFETY DATA SHEET

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

Geelong: 292 Thompson Road, Geelong North VIC 3215

Brisbane: 77 Pamela St, Pinkenba QLD 4008

Auburn: Highgate Street, Auburn NSW 2144

Townsville: Benwell Road, Townsville QLD 4810

Product

Name: Rapid Set Concrete

Other Names: Tradies Own Quick Set Concrete

Use: Rapid Set Concrete is used to produce concrete

Section 2: Hazards Identification

2.1 Classification



DANGER

GHS CLASSIFICATION

Classified as Hazardous according to the Safe Work Australia guidelines for Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

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

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Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

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.

Hazard Class and Category

Skin Corrosion/Irritation: Category 2

Serious Eye Damage / Eye Irritation: Category 1

Specific Target Organ Systemic Toxicity (Single Exposure): Category 3

Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

2.2 GHS Label elements

Pictograms and Signal Words



DANGER

Hazard Statement(s)

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

Prevention Statement(s)

P101	If medical advice is needed, have product container or label at hand.
P202	Do not handle until all safety precautions have been read and understood.
P103	Read label before use.
P260 + P261	Do not breathe dust. Avoid breathing dust.
P264	Wash any skin exposed to the product thoroughly after handling. Do not touch eyes until hands are thoroughly washed clean of material.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves in accordance with AS2161. Wear dust proof eye protection in accordance with (AS/NZS1337.1).

Response Statement(s)

P305+P351+P338	IF IN EYES: Immediately call POISON CENTRE 131126 or Doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P304 + P340 + P305	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P310	Immediately call POISON CENTRE 131126 or Doctor if you feel unwell.
P321	Specific treatment is advised - see first aid instructions.
P362	Take off contaminated clothing and wash before re-use.

Storage Statement(s)

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

Disposal Statement(s)

P501	Dispose of unused contents in accordance with jurisdictional 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: 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, nickel and crystalline silica.

Chemical Entity	Proportion	CAS Number
Cement General Purpose or Blended containing:	18-30%	65997-15-1
Hexavalent Chromium Cr (VI)	<10ppm	18540-29-9
Washed Sand containing:	25-35%	14808-60-7
Crystalline Silica (Quartz)	>95%	14808-60-7
Total respirable silica	Below reporting limits	14808-60-7
Hexavalent Chromium Cr (VI) (in Sand and aggregate)	<1 ppm	18540-29-9
Washed Aggregate	40-50%	
Calcium Sulphate Hemihydrate	<7%	10034-76-1

Section 4: First Aid Measures

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.
Eyes:	Flush thoroughly with flowing water for 15 minutes to remove all traces. If symptoms such as irritation or redness persist, seek medical attention. If wet cement is splashed in the eye, always treat as above, and seek urgent medical attention.
Skin:	Remove heavily contaminated clothing immediately. Wash off skin thoroughly with 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 attention.

First Aid Facilities: Eye wash station. Washing facilities with running water.

Advice to Doctor: 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.

Section 5: Fire Fighting Measures

Fire/Explosion Hazard: None

Hazchem Code: None allocated

Flammability: Not flammable

Extinguishing Media: None required

Hazards from Combustion Products: None

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 manual handling 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 Exposure control measures

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
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

PPE

- Skin:** 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.
- Remove clothing which has become contaminated with wet or dry product to avoid prolonged contact with the skin. If wet product gets into boots, remove socks and boots immediately and wash skin thoroughly. Wash work clothes regularly. To avoid contamination of face and lips and ingestion, wash hands before eating, or smoking.
- Eyes:** 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.
- Respiratory:** 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.

Section 9: Physical and Chemical Properties

- Appearance:** A grey sandy mixture of fine and coarse (14mm) solid particles
- Odour:** No distinctive odour
- Boiling/Melting Point:** Melting point >1200°C
- Vapour Pressure:** None
- Specific Gravity:** None
- Flash Point:** None
- Solubility in Water:** Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH >11). Hardens rapidly
- Particle Size:** Up to 50% of the fresh dry material may be respirable (below 10 microns)

Section 10: Stability and Reactivity

Rapid Set Concrete is compatible with most other building materials, will not decompose into hazardous by-products and does not polymerise. Hardens rapidly upon addition of water.

- Chemical Stability:** Chemically stable
- Conditions to Avoid:** Keep free of moisture during storage. Hardens rapidly when water added.
- Incompatible Materials:** None
- Hazardous Decomposition Products:** None
- Hazardous Reactions:** None

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.

- Swallowed/Ingestion:** Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.
- Eyes:** 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:** 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.
- 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.

11.2 Delayed health effects from exposure.

- Swallowed/Ingestion:** Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.
- Eyes:** Dust may cause irritation and inflammation of the cornea.
- Skin:** 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.
- 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.
- 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 (<1 ppm), 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

Ecotoxicity:	Product forms an alkaline slurry when mixed with water.
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

Rapid Set Concrete 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

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

Rapid Set Concrete is not classified as Dangerous Goods.

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.

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:

2020 – Format updates

2022/2023 – Format updates

Next Review Date for this SDS: 31 December 2026.

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, 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.

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