### SAFETY DATA SHEET

# **Concrete Mix**

# **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 Rd, Geelong North VIC 3215

**Auburn:** 77 Pamela St, Pinkenba QLd 4008 Highgate St, Auburn NSW 2144 **Townsville:** 12 Jensen St, Stuart QLD 4811

#### **Product**

Name: Concrete Mix

Other Names: PROSTRENGTH Extra Strength Concrete Mix

Extra Strength PRO-50 Concrete Mix

**Use:** Concrete Mix is used to form concrete. It is used in soil stabilisation, building

construction, and civil engineering projects.

Concrete mixes can contain various proportions of pozzolans depending on the use case. This SDS covers all blends and incorporates a GHS Hazard identification for the blend with the highest proportion of materials requiring the highest hazard rating. This SDS reflects the handling of Cement Powder in bulk or bagged form, with additional consideration for the material in its wet form. Adding water to Cement changes the properties and the SDS for the listed use cases above should be

referenced.

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





#### 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).

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

#### **Hazard Class and Category**

Serious Eye Damage/Eye Irritation: Category 1B

Skin Corrosion/Irritation: Category 2

Specific Target Organ Toxicity (Single Exposure): Category 3

Specific Target Organ Toxicity (Repeated Exposure): Category 2

#### 2.2 GHS Label elements

**Pictograms and Signal Words** 







#### Danger

#### **Hazard Statement(s)**

**H314** Causes severe skin burns and eye damage.

H318 Causes serious eye damage.H335 May cause respiratory irritation.

H373 May cause damage to lungs and respiratory tract through prolonged or repeated exposure.

#### **Prevention Statement(s)**

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P103 Read label before use

P261 Avoid breathing dust. Dry cement can become easily airborne. Wet surface before cutting

to reduce dust emissions

**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

rinsina.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.

P304 + P305 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

**P337 + P313** If eye irritation persists: Get medical advice/attention.

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 or container as normal general waste or in accordance with

jurisdictional regulations.

#### 2.3 Other hazards

Frequent inhalation of dust material over periods of time increases the risk of developing silicosis and lung disease. Contains Calcium Oxide. Forms Calcium hydroxide when mixed with water, which has a corrosive effect on eyes and skin.

# **Section 3: Composition/Information on Ingredients**

White Cement consists of a crystalline mass manufactured from substances mined from the earth's crust. It contains trace amounts of naturally occurring, metals such as chromium and nickel and crystalline silica.

Proportion	CAS Number
<b>15-35%</b> 8-80%	<b>65997-15-1</b> 65996-69-2
8-50%	68131-74-8
20-95%	65997-15-1
0-5%	10101-41-4
0-7.5%	1317-65-3
0-3%	1305-78-8
<10 ppm	18540-29-9
Below reporting limits	14808-60-7
<b>25-45%</b> >95%	14808-60-7
Below reporting limits	14808-60-7
<1 ppm	18540-29-9
	15-35% 8-80% 8-50% 20-95% 0-5% 0-7.5% 0-3% <10 ppm Below reporting limits 25-45% >95% Below reporting limits



<sup>\*</sup> Specific Target Organ Systemic Toxicity (Single Exposure): Category 3 relates to airborne silica particles from White Cement. Use of recommended PPE is advised.

### **Section 4: First Aid Measures**

### 4.1 Description of necessary first aid measures

Ingestion/Swallowed: Rinse mouth and lips with water. Do not induce vomiting, get medical attention

showing the Safety Data Sheet and the hazard label. If symptoms persist, contact a

Poisons Information Centre on 13 11 26 or a doctor.

**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 material off the skin

thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical

attention for persistent irritation or burning of the skin.

Inhalation: 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/shower.

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.

Ophthalmologist should be sought for burns to eyes.

### 4.2 Symptoms caused by exposure

Eye Damage

Eye Irritation

Skin Irritation/sensitivity

Obstructed or irregular breathing.

## 4.3 Medical attention and special treatment

In case of accident (such as eye exposure) or feeling unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(See paragraph 4.1)

# **Section 5: Fire Fighting Measures**

Fire/Explosion Hazard: None Special Protective None required

Hazchem Code: None allocated Precautions

Flammability: Not flammable and equipment for

Extinguishing Media: None required. fire fighters:

Hazards from None

**Combustion Products:** 



### **Section 6: Accidental Release Measures**

### 6.1 Personal precautions, protective equipment and emergency procedure

Recommended protective clothing when handling product includes gloves (AS2161), boots, long sleeves/pants, eye protection i.e., goggles (AS/NZS1337.1), suitable respirator (AS/NZS1715, 1716).

Remove persons to safety.

### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Limit leakages with earth or sand.

#### 6.3 Methods and materials for containment and cleaning up

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**

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container for other purposes before they have been thoroughly cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials: Keep away from water and sources of moisture.

Instructions as regards storage premises: Protect from moisture to prevent hardening. Storage may be in concrete silos, steel bins or plastic lined multi-ply paper bags. Ensure premises are adequately ventilated.

# **Section 8: Exposure Controls/Personal Protection**

#### 8.1 Exposure control parameters

#### **Exposure standards**

		TWA		STEL	
Ingredient	Reference	ppm	mg/m³	ppm	mg/m³
Calcium carbonate (Limestone, Marble, Whiting)	SWA (AUS)		10		
Calcium oxide	SWA (AUS)		2		
Chromium (VI) compounds (as Cr)	SWA (AUS)		0.05		
Gypsum (Calcium sulphate)	SWA (AUS)		10		
Magnesium oxide (fume)	SWA (AUS)		10		
Portland Cement	SWA (AUS)		10		
Silica – Crystalline Quartz (respirable dust)	SWA (AUS)		0.05		



### 8.2 Engineering controls

Avoid inhalation. Use in well-ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

### 8.3 Individual protection measures and PPE

Eyes / Face: Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes.

Wet material is a greater risk to the eyes than dry powder.

Body/Skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or

Viton. Long sleeved shirt and full-length trousers.

Hands: Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.; AS/NZS

2161.10:

Respiratory: Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site-

specific risk assessment.

# **Section 9: Physical and Chemical Properties**

**Appearance:** A fine powder ranging in colour from grey to off-white

Odour: No distinctive odour

Boiling/Melting Point: Melting point >1200°C

Vapour Pressure: Not applicable

Specific Gravity: 2.75

Flash Point: Not applicable Flammability Limits: Not applicable

**Solubility in Water:** Slight, reacts on mixing with water forming an alkaline solution (caustic, pH>11).

Particle Size: Up to 50% of the fresh dry material may be respirable (below 10 microns)

# **Section 10: Stability and Reactivity**

Chemical Stability: Chemically stable

Conditions to Avoid: Keep free of moisture until use

Incompatible Materials: None

Hazardous Decomposition Products: May evolve toxic gases if heated to decomposition.

Hazardous Reactions:

A corrosive substance harmful to exposed skin is the result of water

addition to the point of creating a paste or slurry. See SDS for Wet

Concrete.

# **Section 11: Toxicological Information**

Acute toxicity No known toxicity data is available for this product. Based on available data, the

classification criteria are not met.

**Skin** Irritating to the skin. Contact with powder or wetted form may result in irritation, rash

and dermatitis.

Eye Irritating to the eyes. Contact may result in irritation, lacrimation, pain, redness,

corneal burns and possible permanent damage. Risk increases if material is in a wet

state.



**Sensitisation** This product is not classified as a skin or respiratory sensitiser. However, some

individuals may exhibit an allergic response upon exposure to cement, possibly due

to trace amounts of chromium.

Mutagenicity Not classified as a Mutagen.

Carcinogenicity This product may contain crystalline silica, when the blend contains Fly ash, 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.

**Reproductive** Not classified as a reproductive toxicant.

**STOT – single exposure** 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.

**STOT – repeated exposure** Repeated exposure to respirable silica may result in pulmonary fibrosis (silicosis).

Silicosis is a fibronodular lung disease caused 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.

**Aspiration** This product is a stable solid and aspiration hazards are not expected to occur.

### **Section 12: Ecological Information**

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

Persistence and Degradeability: Product is persistent and would have a low degradability.

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

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

# **Section 13: Disposal Considerations**

Reclaim excess material where possible, with extreme care taken to avoid dust generation. Use a vacuum to collect where possible, and wear PPE as indicated in section 8.3.

White Cement can be treated as a common waste for disposal to an approved landfill site, in accordance with local authority guidelines.

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

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).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Do not re-use empty containers unless thoroughly cleaned.

# **Section 14: Transport Information**

Not classified as dangerous in the meaning of transport regulations. May be transported by Ship, Rail, Air and Road.

UN Number:

Proper Shipping Name:

Class and Subsidiary Risk:

None allocated

None allocated

None allocated

None allocated



**Special precautions for user:** Avoid generating and breathing dust

Hazchem Code: None allocated

# **Section 15: Regulatory Information**

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).

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

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

### **Section 16: Other Information**

For further information on this Telephone: 1300 CEMENT (1300 236 368 - Business Hours)

product contact: Fax: 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.

[SDS Ends]

