

SAFETY DATA SHEET

Hydrated Lime

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

Tamaree: 276 Tamaree Rd, Gympie QLD 4570, Australia
Attunga: 220 Garthowen Rd, Attunga NSW 2345, Australia
Galong: 342 Eubindal Rd, Galong NSW 2585, Australia
Angaston: 845 Stockwell Rd, Angaston SA 5353

Product

Name: Hydrated Lime**Other Names:** Slaked Lime, Calcium Hydrate, Lime Hydrate, Calcium Hydroxide, Builders Lime, Garden Lime, Plasterers Lime**Use:** Hydrated lime is used in water and sewage treatment, construction, soil stabilisation, environmental applications, etc.

Section 2: Hazards Identification

2.1 Classification

**DANGER**For more information call **1300 CEMENT** (1300 236 368)
or visit www.cementaustralia.com.au*Mix it with the best.*

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 1**

Skin Corrosion/ Irritation: **Category 1B**

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 organs 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.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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. Nitrile gloves of 8mil thickness. 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.
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.
P308 + P313	If exposed or concerned: 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	Store locked up.

Disposal Statement(s)

P501	Dispose of unused contents or container as normal general waste or in accordance with jurisdictional regulations.
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Section 3: Composition/Information on Ingredients

Chemical Entity	Proportion	CAS Number
Water	0.1 - 2.5%	7732-18-5
Calcium Hydroxide	90 - 95%	1305-62-0
Magnesium Hydroxide	0.5 - 1.0%	1309-42-8
Crystalline Silica (Quartz)	<1%	14808-60-7
Total respirable silica	Below reporting limits	14808-60-7
Silicon Dioxide	0.5 - 2%	7631-86-9
Aluminium Dioxide	0 - 2%	1344-28-1
Iron Oxide	0 – 0.4%	1309-37-1

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:	Immediately remove all contaminated clothing, including footwear. Wash material off skin, using plenty of water preferably under shower. If effects persist, seek medical attention.
Inhalation:	Remove to fresh air away from the dusty area. Seek medical attention.
First Aid Facilities:	Eye wash station. Washing facilities with running water.
Advice to Doctor:	Treat symptomatically as for poisoning with strong alkali. Contact Poisons Information Centre: Tel 13 11 26 (Australia wide)

Section 5: Fire Fighting Measures

Fire/Explosion Hazard:	Hydrated Lime is non-combustible. Under fire conditions this product may emit toxic and/or irritating fumes and gases. The product decomposes with loss of water at approx. 5800°C to form calcium oxide (quicklime).
Hazchem Code:	None allocated
Flammability:	Not flammable
Extinguishing Media:	Water
Hazards from Combustion Products:	None
Danger of violent reaction or explosion:	Violent reactions with maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus.
Evacuate	No

Section 6: Accidental Release Measures

Spills:	Increase ventilation. Evacuate all unprotected personnel. PPE must be worn to clean up spillages with broom, shovel, or vacuum equipment. Keep out of sewer, storm water drains, and natural waterways.
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Section 7: Handling and Storage

Handling:	When supplied in bags these need to be handled in accordance with manual handling Code of Practice.
Storage:	Hydrated Lime should be stored in a cool protected place away from moisture, strong oxidants or acids and to minimize dust emissions. Storage in steel or concrete bins and silos, or plastic lined bags, is appropriate.

Section 8: Exposure Controls/Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Calcium hydroxide TWA: 5 mg/m³

Crystalline Silica (Quartz)TWA: 0.05 mg/m³ (i.e. the average airborne concentration of a substance when calculated over a normal eight hour working day, for a five-day week.)

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable dust/ particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Eye Protection

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Hand Protection

Wear gloves of impervious material such as PVC and conforms to relevant regulations.

Body Protection

Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Section 9: Physical and Chemical Properties

Appearance:	White to off-white powder
Odour:	No odour
Boiling/Melting Point:	Decomposes to water and calcium oxide at 580°C
Vapour Pressure:	Not applicable
Specific Gravity:	2.4 – 2.8
Bulk Density:	450-800kg/m ³
Flash Point:	Not applicable
Flammability Limits:	Non-combustible
Solubility In Water:	Approx. 1.6g/L @20°C
pH:	Approximately 12
Particle Size:	9% < 100µm

Section 10: Stability and Reactivity

Reactivity:	Reacts with incompatible materials.
Chemical Stability:	Stable under normal conditions of storage and handling.
Avoid:	Extremes of temperature, dust accumulation and direct sunlight. Moisture.
Incompatible materials:	Oxidising agents, strong acids, nitro-organic compounds, maleic anhydride and phosphorus.
Decomposition Products:	Thermal decomposition may result in the release of toxic and/or irritating fumes and gases. Decomposes with loss of water at approx. 580°C to form calcium oxide (quicklime).
Hazardous reactions:	Reacts exothermically with acids. Absorbs carbon dioxide from air. Attacks aluminium, lead and brass in the presence moisture. Hazardous Polymerization Will not occur.

Section 11: Toxicological Information

Acute Toxicity – Oral:	For calcium hydroxide: LD50 (rat): 7,340 mg/kg
Ingestion:	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
Inhalation:	May cause respiratory irritation. Inhalation of product dust can cause irritation of the nose, throat and respiratory system. Repeated exposure to respirable crystalline silica dust may lead to silicosis, or other serious delayed lung injury. The onset of silicosis is usually slow and lung

damage may occur even when no symptoms or signs of ill-health have occurred. Silicosis can develop to a more serious degree even after exposure has ceased and may also lead to other diseases including heart disease and scleroderma. Exposure by inhalation may aggravate pre-existing upper respiratory and lung disorders such as bronchitis, emphysema and asthma. Chronic exposure to this material may aggravate existing respiratory disorders and lung disorders such as bronchitis, emphysema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

Skin:	Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.
Eye:	Causes serious eye damage. On eye contact this product will cause tearing, stinging, blurred vision, and redness. For calcium hydroxide - Eye Irritation (rabbit): Severe (Standard Draize Test, 10 mg)
Germ cell mutagenicity:	Not considered to be a mutagenic hazard.
Carcinogenicity:	This product contains crystalline silica which is classified as carcinogenic to humans (IARC Group 1). However, RSC is below reporting limits.
Reproductive Toxicity:	Not considered to be toxic to reproduction.
STOT-single exposure:	Not expected to cause toxicity to a specific target organ.
STOT-repeated exposure:	May cause damage to organs through prolonged or repeated exposure by inhalation.
Aspiration Hazard:	Not expected to be an aspiration hazard.

Section 12: Ecological Information

Ecotoxicity:	Because of the high pH of this product, it would be expected to produce significant acute ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Persistence and Degradability:	Product has no bioaccumulation or food chain toxicity potential.
Mobility:	Soluble in water (as hydroxide) to form alkaline solution. Low mobility in most ground conditions.

Section 13: Disposal Considerations

Material should be recycled or neutralised with dilute hydrochloric acid to a pH of 6-9, before disposal in accordance with local authority guidelines. Keep out of sewer, storm water drains, and natural waterways.

Section 14: Transport Information

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

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN Number:	None allocated
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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

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

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

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: 2019 – GHS Compliance edits made, and supplementary compliance edits added.

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]