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

Gladstone: Landing Rd, Fisherman's Landing, Gladstone QLD 4680

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

Hazardous Substance. Non-dangerous Goods Skin Corrosion/Irritation (Category 1c) Sensitisation – Respiratory (Category 1)





Danger

Causes severe skin burns and eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

CAN CAUSE SKIN BURNS & EYE DAMAGE: Avoid contact with the eyes and skin from both wet and dry powder. Wet powder can be corrosive to the eyes and skin and may cause skin sensitisation (dermatitis). Safety: Wear suitable protective clothing, gloves (AS2161), and eye/face protection (AS/NZS1337.1).

IF ON SKIN: Wash thoroughly after handling. Wash clothes before re-use and separately from other clothing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

RESPIRATORY SENSITISERS: Avoid breathing dust. Repeated inhalation of the dust containing crystalline silica may cause bronchitis, silicosis (scarring of the lung) and the risk of scleroderma. Safety: When exposed to dust, wear a suitable respirator (AS/NZS1715, 1716). When cutting or abrading concrete, keep it wet to avoid creating hazardous dust.

IF INHALED: Remove victim to fresh air immediately and keep at rest in a comfortable position for breathing.

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





SAFETY EQUIPMENT: Recommended protective clothing when handling product includes gloves, boots, long sleeves/pants, eye protection i.e., goggles, face mask.

FIRST AID: If any above symptoms persist, seek medical attention or contact Poisons Information Centre on 13 11 26 (Australia wide).

DISPOSAL: Follow safety instructions and collect in containers for disposal as trade waste in accordance with local authority guidelines. Please dispose of packaging in appropriate general waste collection (not suitable for recycling).

SPILLS/LEAKS: Keep out of sewers and stormwater.

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: Wash mouth and lips with copious amounts of water, and give limited amounts of milk or water to

drink (150ml). Do not induce vomiting. Seek medical attention.

Eyes: Hold eyes open and flush with copious amounts of water for at least 10 minutes.

Seek 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.

Inhaled: Remove to fresh air away from the dusty area. Seek medical attention.

First Aid Facilities: Eye wash station.

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

Hazchem Code:

Flammability:

None allocated

Not flammable

Extinguishing Media: Water Hazards from Combustion Products: None

Danger of violent reaction or Violent reactions with maleic anhydride, nitroethane, nitromethane,

explosion: nitroparaffins, nitropropane and phosphorus.

Evacuate No

Section 6: Accidental Release Measures

Spills: PPE must be worn to clean up spillages with broom, shovel, or vacuum equipment.

Keep out of sewer, storm water drains, and natural waterways.



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

8.1 Control parameters

Chemical Entity Proportion CAS Number

 Calcium Oxide
 0-3%
 1305-78-8

 Crystalline Silica (Quartz)
 <1 up to 10%</td>
 14808-60-7

Exposure standards

Engineering Controls:

All work with Hydrated Lime should be carried out in a manner that minimises dust generation, exposure to dust and repeated skin contact. When handling Hydrated Lime, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. For bulk deliveries, closed pumping systems are recommended. For handling of individual bags, follow instructions for personal protection. Work areas should be cleaned regularly by wet sweeping or vacuuming.

8.2 Personal Protection

Skin: If handling Hydrated Lime or products containing Quicklime, personnel should wear protective clothing and

impervious boots, (Australian and New Zealand Standard AS/NZS 4501) and suitable impervious gloves

such as PVC (AS 2161).

Remove clothing that has become contaminated with wet or dry product to avoid prolonged contact with the skin. If 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: Avoid contact with eyes. Splash resistant Safety Glasses with side shields or safety goggles (AS/NZ

1336) should be worn or a face-shield.

Respiratory: In dusty environments use a respirator (filter mask) such as Class P1 or P2 (Australian and New Zealand

Standards AS/NZS 1715 and AS/NZS 1716).

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/m³

Flash Point: Not applicable

Flammability Limits: Non-combustible

Solubility In Water: Approx. 1.6g/L @20°C

pH: Approximately 12

Particle Size: Approximately 12

Section 10: Stability and Reactivity

An alkaline material that reacts vigorously with acids, generating some heat. May absorb carbon dioxide from the atmosphere, forming calcium carbonate. Soluble in glycerol, aqueous solution of sucrose, and ammonium chloride. Incompatible with maleic anhydride, nitroparaffins, and phosphorus.



Section 11: Toxicological Information

Acute toxicity Has a caustic reaction and is corrosive to the mouth and throat.

Skin Irritating to the skin. Contact with powder or wetted form may result in caustic reaction, rash and dermatitis.

Eye Irritation and corrosive to the eyes. May cause chemical conjunctivitis and redness and watering of

eyes and damage to cornea.

Sensitization Irritating and drying to the skin. May cause alkali burns and irritant or allergic dermatitis.

Mutagenicity Insufficient data available to classify as a mutagen.

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.

Reproductive Insufficient data available to classify as a reproductive toxin.

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 solid and aspiration hazards are not expected to occur.

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

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

Quicklime is classified as non-Dangerous Goods.

All chemicals 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: Facsimile: 1800 CEMENT (1800 236 368)

Previous Edition: 2014 - GHS Compliance edits made and supplementary compliance edits added.

Next Review Date for this MSDS: 31 December 2020.

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.

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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.

