

## 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](http://www.cementaustralia.com.au)*Mix it with the best.*

**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
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

<b>Swallowed:</b>	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.
<b>Eyes:</b>	Hold eyes open and flush with copious amounts of water for at least 10 minutes. Seek medical attention.
<b>Skin:</b>	Immediately remove all contaminated clothing, including footwear. Wash material off skin, using plenty of water preferably under shower. If effects persist, seek medical attention.
<b>Inhaled:</b>	Remove to fresh air away from the dusty area. Seek medical attention.
<b>First Aid Facilities:</b>	Eye wash station.
<b>Advice to Doctor:</b>	Treat symptomatically as for poisoning with strong alkali. Contact Poisons Information Centre: Tel 13 11 26 (Australia wide)

---

## Section 5: Fire Fighting Measures

<b>Fire/Explosion Hazard:</b>	Hydrated Lime is non-combustible
<b>Hazchem Code:</b>	None allocated
<b>Flammability:</b>	Not flammable
<b>Extinguishing Media:</b>	Water
<b>Hazards from Combustion Products:</b>	None
<b>Danger of violent reaction or explosion:</b>	Violent reactions with maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus.
<b>Evacuate</b>	No

---

## Section 6: Accidental Release Measures

<b>Spills:</b>	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%	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/m<sup>3</sup>
- 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

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

<b>Acute toxicity</b>	Has a caustic reaction and is corrosive to the mouth and throat.
<b>Skin</b>	Irritating to the skin. Contact with powder or wetted form may result in caustic reaction, rash and dermatitis.
<b>Eye</b>	Irritation and corrosive to the eyes. May cause chemical conjunctivitis and redness and watering of eyes and damage to cornea.
<b>Sensitization</b>	Irritating and drying to the skin. May cause alkali burns and irritant or allergic dermatitis.
<b>Mutagenicity</b>	Insufficient data available to classify as a mutagen.
<b>Carcinogenicity</b>	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.
<b>Reproductive STOT – single exposure</b>	Insufficient data available to classify as a reproductive toxin. 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.
<b>STOT – repeated exposure</b>	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.
<b>Aspiration</b>	This product is a solid and aspiration hazards are not expected to occur.

---

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	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.
<b>Persistence and Degradability:</b>	Product has no bioaccumulation or food chain toxicity potential.
<b>Mobility:</b>	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

<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

