



## MATERIAL SAFETY DATA SHEET

**Product Name:** SEARLES HYDRATED LIME

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**Issued:** JAN 2001  
**MSDS No.:** caho01

**\*HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA\***

### 1. IDENTIFICATION

**Other Names:** Calcium Hydroxide  
**Product Code:** HLI2; HLI5  
**UN Number:** None Allocated  
**Dangerous Goods Class:** None Allocated  
**Secondary Risk:** None Allocated  
**Hazchem Code:** None Allocated  
**Pack Group:** None Allocated  
**EPG:** None Allocated  
**Poisons Schedule:** None Allocated

**Uses:**

Fertiliser for gardens and other horticultural purposes.

#### 1.1 PHYSICAL DESCRIPTION / PROPERTIES

**Appearance:** Odourless, white powder.

**Boiling Point:** Not Available  
**Melting Point:** Not Available  
**Vapour Pressure:** Not Applicable  
**Specific Gravity:** 0.695 g/cm<sup>3</sup> @ 20°C (water = 1)  
**Flash Point (Test: Closed Cup):** Not Applicable  
**Flammability Limits (as % volume in air):** Not Applicable  
**Solubility in water:** Not Available

#### 1.2 OTHER PROPERTIES

**pH:** 12  
**Decomposition Point:** 550°C  
**Solubility:** Soluble in glycerol, aqueous solutions of sucrose and aqueous solutions of ammonium chloride. Incompatible with maleic anhydride, nitroparaffins, phosphorus  
**Reactivity:** May react vigorously or violently with acids, generating much heat. May absorb carbon dioxide from the air, forming calcium carbonate.

#### 1.3 INGREDIENTS

| Chemical Entity   | C.A.S. NO.   | Proportion |
|-------------------|--------------|------------|
| Calcium hydroxide | [1305-62-0]  | 93.2%      |
| Silicon dioxide   | [63231-67-4] | 1.2%       |
| Calcium carbonate | [471-34-1]   | 1.0%       |
| Aluminium oxide   | [1344-28-1]  | 0.4%       |
| Other impurities  | —            | to 100%    |



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### 2. HEALTH HAZARD INFORMATION

#### 2.1 HEALTH EFFECTS

##### *ACUTE*

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

**Swallowed:** Swallowing may cause soreness and chemical burns to sensitive tissues. Estimated lethal dose for an adult is about 450g (as calcium hydroxide).

**Eye:** The dust may cause severe chemical burns to sensitive tissues with risk of blindness.

**Skin:** Frequent and prolonged contact may lead to irritation, or even chemical burns. May cause severe chemical burns on contact with cuts or open sores. No effect should occur if promptly washed off.

**Inhaled:** If present as high concentrations of airborne dust, prolonged contact may cause irritation to the nose, throat and respiratory system.

##### *CHRONIC*

Repeated skin contact may cause dermatitis. Inhalation of dust is reported to lead to bronchitis and pneumonia.

#### 2.2 FIRST AID

**Swallowed:** DO NOT induce vomiting. Immediately rinse mouth with water. Give several glasses of water to drink. If vomiting occurs give further water. Seek medical attention immediately.

**Eye:** Hold eyes open and flush thoroughly for 15 minutes with plenty of water. Seek medical attention immediately.

**Skin:** Wash thoroughly with mild soap and water. Remove and wash contaminated clothing before re-use. If irritation occurs seek medical attention.

**Inhaled:** Remove victim from exposure to fresh air – avoid becoming a casualty. Keep at rest until fully recovered. If symptoms persist seek medical attention

#### 2.3 FIRST AID FACILITIES

Ensure an eye bath and hand wash basin are available and ready for use.

#### 2.4 ADVICE TO DOCTOR

Product is mostly calcium hydroxide. Very Alkaline. Treat symptomatically based on judgement of doctor and individual reactions of patient. Contact Poisons Information Centre.

#### 2.5 TOXICITY DATA

Oral LD<sub>50</sub> (rat) = 7340 mg/kg



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### 3. PRECAUTIONS FOR USE

#### 3.1 EXPOSURE STANDARDS

The National Occupational Health and Safety Commission (Worksafe Australia) have established an exposure standard for this product.

Calcium Hydroxide = 5 mg/m<sup>3</sup>

The exposure limit is expressed as a time-weighted average (TWA) concentration over an 8-hour working shift, for a 5-day working week, and is the recommended exposure standard of Worksafe Australia.

#### 3.2 ENGINEERING CONTROLS

All work with this product should be carried out in such a way as to avoid skin contact and minimise exposure to dust. Maintain adequate exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Avoid generating and inhaling dusts, and keep containers closed when not in use.

#### 3.3 PERSONAL PROTECTION

**Hygiene:** When using do not eat, drink or smoke. Wash hands thoroughly before smoking, eating or using toilet facilities.

**Respiratory:** Avoid inhaling dust. Where high concentrations of airborne dust are present, a dust respirator conforming to AS/NZS 1715 & 1716 should be worn

**Eyes:** Non-fogging dust resistant goggles or safety glasses (AS/NZS1336) should be worn if there is a risk of dust getting into the eyes.

**Hands:** Wear standard duty gloves (AS2161).

**Feet:** Wear safety boots or shoes.

**Skin:** Wear loose, comfortable long sleeved shirt and long trousers. Wash with mild soap and water immediately after working with this product. Launder work clothes regularly.

#### 3.4 FLAMMABILITY

Non-combustible material.



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### 4. SAFE HANDLING INFORMATION

#### 4.1 STORAGE / TRANSPORT

Not classified as a Dangerous Good by the ADG Code.  
Store in a dry place at room temperature, out of reach of children.  
Store in original container that is kept closed.  
Store away from acids.

#### 4.2 PACKAGING AND LABELING

**Correct Shipping Name:** HYDRATED LIME  
**UN Number:** None Allocated  
**Dangerous Goods Class:** None Allocated  
**Secondary Risk:** None Allocated  
**Hazchem Code:** None Allocated  
**Pack Group:** None Allocated  
**EPG:** None Allocated  
**Poisons Schedule:** None Allocated

#### Worksafe Risk and Safety Phrases

Not Applicable

#### 4.3 SPILLS AND DISPOSAL

**Spills:** Wear protective equipment to prevent skin and eye contamination and inhalation of dust. Vacuum or sweep up spills and shovel into suitable containers for re-use or disposal, but avoid generating dust. Broken packages should be added to the container. Wash down the spill area with large quantities of water. DO NOT contaminate streams, rivers, sewers or watercourses.

**Disposal:** Dispose of in accordance with all Local, State and Federal regulations an approved waste disposal facility.

#### 4.4 FIRE AND EXPLOSION HAZARD

**Fire / Explosion:** Non flammable.

**Extinguishing Media:** For fires involving this material, use any means suitable for extinguishing surrounding fire. Spray water on decomposing mass and fight fire from upwind; do not use more water than necessary. Wear self-contained breathing apparatus (SCBA) if downwind, in a confined space or if in smoke or fumes. Contain run-off.



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**5. OTHER INFORMATION**

**5.1 SPECIAL PRECAUTIONS**

No data available.

**5.2 CONTACT POINTS**

| <b>ORGANIZATION</b>                                      | <b>LOCATION</b>        | <b>TELEPHONE</b>           | <b>ASK FOR</b>    |
|--|------------------------|----------------------------|-------------------|
| J.C. & A.T. Searle Pty Ltd<br>Poisons Information Centre | Kilcoy<br>Brisbane QLD | (07) 5497 2022<br>13 11 26 | Technical Officer |

**5.3 DISCLAIMER**

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