# Safety Data Sheet Hydrated Lime

| Section 1:                 | Material and Supplier Information   |
|----------------------------|---|
| Product Name:              | Hydrated Lime   |
| Applicable In:             | Australia   |
| Other Names:               | Hydrated Lime   |
| Recommended Use:           | Hydrated Lime can be used as neutralizing agent in water and sewage treatment, a binder in mortars and renders, and soil stabilization. |
| Company Details:           | Independent Cement & Lime Pty Ltd<br>750 Lorimer Street<br>Port Melbourne, VIC 3207<br>ABN 49 005 829 550                               |
| Emergency contact details: | Contact Person: Technical Manager<br>Telephone: Office hours 03 9676 0000 or Poison information center 13 11 26                         |
| Phone:                     | VIC 03 9676 0000  |
| Fax:                       | VIC 03 9646 4954  |

This Safety Data Sheet (SDS) is issued by Independent Cement Pty Ltd in accordance with the Code and guidelines from the Australian Safety and Compensation Council (ASCC). The information in it must not be altered, deleted or added to. Independent Cement Pty Ltd will not accept any responsibility for any changes made to its SDS by any other person or organization. Independent Cement Pty Ltd will issue a new SDS when there is a change in product specifications and/ or ASCC standards, guidelines or regulations.

## Section 2: Hazards Identification

Statement ofThis product is classified as HAZARDOUS according to Safe Work Australia criteria. NotClassified as a dangerous good by the criteria of the ADG code, IMDG or IATA.

#### **GHS Classifications**

| Skin Corrosion/ Irritation                                     | Criteria 2 |
|--|------------|
| Serious Eye Damage/Eye Irritation:                             | Criteria 1 |
| Specific Target Organ Systematic Toxicity (Repeated Exposure): | Category 2 |

#### SIGNAL WORD DANGER

Independent

Cement

Pictograms



Independent Cement & Lime Pty Ltd ABN 83 803 695 714

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#### **Hazard Statements**

| H315 | Causes skin irritation  |
|------|---|
| H317 | May cause an allergic skin reaction   |
| H318 | Causes serious eye damage   |
| H373 | May cause damage to lungs and respiratory tract through prolonged or repeated exposure. |

#### **Prevention Statements**

| P260 | Do not breathe dust/fume/gas/mist/vapours/spray                              |
|------|--|
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection |

### **Response Statements**

| P302+P352           | IF ON SKIN: Wash with plenty of soap and water   |
|---------------------|--|
| P304+P340           | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  |
| P305+P351+P338+P321 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present.   |
|                     | Continue rinsing. The use of Diphoterine® has been shown to significantly reduce the risk of permanent injury. It is essential that the Diphoterine is used as quickly as possible (ie. within 10 seconds of contact with lime) in order to obtain the maximum benefit from its absorbent and neutralising properties. |
| P333 + P313         | If skin irritation or rash occurs get medical advice/attention.  |

### **Disposable Statements**

P501 Dispose of contents/container in accordance with relevant regulations.

| UN No    | None Allocated | Hazchem Code       | None<br>Allocated | Pkg Group | None Allocated |
|----------|----------------|--------------------|-------------------|-----------|----------------|
| DG Class | None Allocated | Subsidiary Risk(s) | None<br>Allocated | EPG       | None Allocated |

# Section 3: Composition / Information on Ingredients

| Ingredient          | Formula             | Proportion | CAS Number |
|---------------------|---------------------|------------|------------|
| Calcium hydroxide   | Ca(OH) <sub>2</sub> | 85-95%     | 1305-62-0  |
| Magnesium hydroxide | Mg(OH) <sub>2</sub> | 0.5-1.5%   | 1309-42-8  |



| Crystalline silica (Quartz) | SiO <sub>2</sub>               | 0.4-0.7% | 14808-60-7 |
|-----------------------------|--------------------------------|----------|------------|
| Aluminum Oxide              | Al <sub>2</sub> O <sub>3</sub> | 0-2%     | 1344-28-1  |

# Section 4: First Aid Measures

| Eye:                 | If Hydrated Lime is splashed in to the eyes flush thoroughly with flowing water until advised to stop by a doctor If available, immediately flush eyes with Diphoterine solution  |
|----------------------|---|
| Inhalation:          | Remove from dusty area to fresh air. If symptoms persist, seek medical attention.   |
| Skin:                | Remove heavily contaminated clothing immediately. Wash off skin thoroughly with water. A  |
|                      | shower may be required. Seek medical attention for persistent irritation or burning of the skin. If   |
|                      | available, immediately flush eyes with Diphoterine solution   |
| Ingestion:           | Rinse mouth and lips with water. Do not induce vomiting. Give water to drink to dilute stomach  |
|                      | contents. If symptoms persist, seek medical attention.  |
| Advice to Doctor:    | Treat symptomatically.  |
|                      |   |
| First Aid Facilities | Eye wash station.   |
|                      |   |
| Additional           | Aggravated Medical Conditions   |
| Information          |   |
|                      |   |
| Inhalation           | Over exposure resulting from prolonged and repeated inhalation of dust containing crystalline   |
|                      | silica can cause bronchitis, silicosis (scarring of the lung). It may also increase the risk of   |
|                      |   |
|                      | scleroderma (a disease affecting the connective tissue of the skin, Joints, blood vessels and   |
|                      | scleroderma (a disease affecting the connective tissue of the skin, Joints, blood vessels and internal organs) and lung cancer. Epidemiological studies have shown that smoking increases   |
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| Skin                 | internal organs) and lung cancer. Epidemiological studies have shown that smoking increases<br>the risk of bronchitis, silicosis (scaring of the lung) and lung cancer in persons exposed to<br>crystalline silica.   |
| Skin                 | <ul><li>internal organs) and lung cancer. Epidemiological studies have shown that smoking increases</li><li>the risk of bronchitis, silicosis (scaring of the lung) and lung cancer in persons exposed to</li><li>crystalline silica.</li><li>Prolonged and repeated skin contact with Hydrated Lime powder, hydrated lime in wet concrete,</li></ul>   |
| -                    | <ul> <li>internal organs) and lung cancer. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scaring of the lung) and lung cancer in persons exposed to crystalline silica.</li> <li>Prolonged and repeated skin contact with Hydrated Lime powder, hydrated lime in wet concrete, mortars and slurries may result in irritant dermatitis or alkaline burns.</li> </ul>  |
| Skin<br>Eye          | <ul> <li>internal organs) and lung cancer. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scaring of the lung) and lung cancer in persons exposed to crystalline silica.</li> <li>Prolonged and repeated skin contact with Hydrated Lime powder, hydrated lime in wet concrete, mortars and slurries may result in irritant dermatitis or alkaline burns.</li> <li>Irritating to the eye. If Hydrated Lime is splashed in to the eye, alkaline burns can cause</li> </ul>                   |
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Fire and Explosion:No fire or explosion hazard exists.Extinguishing:Non-flammable; use suitable extinguishing agent for surrounding fireHazchem Code:None Allocated



| Section 6:             | Accidental Release Measures  |
|------------------------|--|
| Spillage:              | If spill (bulk), contact emergency services if appropriate. Wear dust proof goggles, PVC/rubber gloves, a Class P2 respirator (where an inhalation risk exists), coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating dust. |
| Emergency              | Follow safety requirements for personal protection under Section 8<br>Exposure Controls/Personal Protection.   |
| Procedures             |  |
| Section 7:             | Handling and Storage   |
| Handling:              | Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.  |
| Storage:               | Store in a cool, dry, well ventilated area, removed from   |
|                        | excessive moisture and heat.   |
| Property/Environmental | Refer to Section 13.   |
| Section 8:             | Exposure Controls / Personal Protection  |
| Ventilation            | Do not inhale dust/powder. Use with adequate ventilation. Where a dust inhalation hazard   |
|                        | exists, mechanical extraction ventilation is recommended. Maintain dust levels below the   |
|                        | recommended exposure standard.   |
| Exposure Standards     | Aluminum Oxide (1344-28-1)   |
|                        | ES-TWA: 10 mg/m <sup>3</sup> (Respirable Dust)   |
|                        | Calcium hydroxide (1305-62-0)  |
|                        | ES-TWA: 5 mg/m <sup>3</sup> (Respirable Dust)  |
|                        | Iron (III) oxide (1309-37-1)   |
|                        | Crystalline Silica (Quartz) (14808-60-7)   |
|                        | ES-TWA: 0.1 mg/m <sup>3</sup> (Respirable Dust)  |
| PPE                    | Wear dust proof goggles/safety glasses and rubber or PVC gloves. Where an inhalation risk exists, wear a clear P2 respirator. If there is potential for prolonged and/or excessive skin contact, wear a long sleeve shirt and full-length trouser. At high dust levels, wear a Class P3 respirator or a Powered Air Purifying Respirator (PAPR) with class P3 filter.    |





## Section 9:

# **Physical and Chemical Properties**

| Appearance       | White                       | Solubility (water)          | 100 g/L.      |
|------------------|-----------------------------|-----------------------------|---------------|
| Odor             | Slight odor                 | Specific Gravity            | 2.1 – 2.3     |
| pH (in water)    | Approximately 12            | % Volatiles                 | Not Available |
| Vapor Pressure   | Not Available               | Flammability                | Non-Flammable |
| Vapor Density    | Not Available               | Flash Point                 | Not Relevant  |
| Boiling Point    | Not Available               | Upper Explosion Limit       | Not Relevant  |
| Melting Point    | > 580°C                     | Lower Explosion Limit       | Not Relevant  |
| Evaporation Rate | Not Available               | Autoignition<br>Temperature | Not Available |
| Bulk Density     | 300 - 700 kg/m <sup>3</sup> |                             |               |
| Particle Size    | 99% < 75 μm                 |                             |               |

## Section 10:

# **Stability and Reactivity**

| Chemical Stability:     | Chemically Stable   |
|-------------------------|---|
| Conditions to Avoid:    | Keep free of moisture   |
| Incompatible Materials  | Incompatible with acid (e.g. hypochlorite), maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus.   |
| Decomposition Products: | May evolve calcium oxides when heated to decomposition  |
| Hazardous Reactions:    | None  |
| Section 11:             | Toxicological Information   |
| Acute Toxicity          | No known toxicity data for this product.  |
| Eyes                    | Irritant upon contact with powder/dust. Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage.   |
| Inhalation              | Slightly corrosive. Irritating to the respiratory system, causing coughing and  |
|                         | sneezing. Over exposure may result in severe mucous membrane irritation and<br>bronchitis. Crystalline silica can cause silicosis (lung disease) with chronic over<br>exposure, however due to low levels present and product application, adverse<br>health effects are not anticipated. |
| Skin                    | Irritating to the skin. Prolonged and repeated contact with powder or wetted form may result in skin rash, dermatitis and sensitisation.  |
| Ingestion               | Slightly corrosive. Ingestion may result in burns to the mouth and throat, with vomiting and abdominal pain. Due to product form, ingestion is not considered a likely exposure route.  |
| Mutagenicity            | Insufficient data available for this product to classify as a mutagen.  |
| Carcinogenicity         | Hydrated Lime is not classified as a carcinogen by NOHSC.   |



| Section 12:                      | Ecological Information   |  |  |  |  |
|----------------------------------|--|--|--|--|--|
| Toxicity                         | The aquatic toxicity of calcium hydroxide is due to its alkalinity.  |  |  |  |  |
| Persistence and<br>Degradability | Neutralised to calcium carbonate by absorption of atmospheric carbon dioxide and is not degraded by oxidation.   |  |  |  |  |
| Mobility in Soil                 | A low mobility would be expected in a landfill situation.  |  |  |  |  |
| Section 13:                      | Disposal Considerations  |  |  |  |  |
| Waste Disposal                   | <b>e Disposal</b> Neutralise with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amou absorb with sand or similar and dispose of to an approved landfill site Contact the manufacturer for additional information. |  |  |  |  |
| Legislation                      | Dispose of in accordance with relevant local legislation. Keep out of sewer stormwater drains.   |  |  |  |  |

## Section 14: Transport Information

Not classified as a dangerous good by the criteria of the ADG code. Transport is by rail or road in bulk or bag form.

Drivers of trucks transporting bagged products should ensure that the bags are properly restrained.

| Shipping Name | None Allocated |                    |                |           |                |
|---------------|----------------|--------------------|----------------|-----------|----------------|
| UN No         | None Allocated | Hazchem Code       | None Allocated | Pkg Group | None Allocated |
| DG Class      | None Allocated | Subsidiary Risk(s) | None Allocated | EPG       | None Allocated |

## Section 15: Regulatory Information

Poison Schedule AICS 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). All chemicals listed on the Australian Inventory of Chemical Standards (AICS).

## Section 16: Other Information

Additional Information PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The Recommendation for protective equipment contained within this SDS report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the



availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare an SDS report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

ABBREVIATIONS:

mg/m<sup>3</sup> – Milligrams per cubic metre

ppm – Parts Per Million

ES-TWA - Exposure Standard - Time Weighted Average

CNS – Central Nervous System

NOS - Not Otherwise Specified

pH – relates to hydrogen ion concentration – this value will relate to a scale of 0 – 14, where 0 is highly acidic and 14 is highly alkaline.

CAS# - Chemical Abstract Service Number – used to uniquely identify chemical compounds. IARC – International Agency for Research on Cancer.

 
 Report Status
 This document has been compiled by Independent Cement and Lime Pty Ltd the manufacturer of the product and serves as the manufacturer's Safety Data Sheet.

While the information in this Safety Data Sheet has been prepared in good faith, Building Product Supplies does not warrant that the information is accurate, complete or up to date.

For further information on this product contact:

Telephone: Office hours 03 9676 0000

Facsimile: 03 9646 4954

Web site: http://www.independentcement.com.au/

**Advice Note** 

**Contact Point** 

The information in this document is believed to be accurate. Please check the currency of this SDS by contacting:

03 9676 0000

#### Or

#### www.independentcement.com.au/

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- determine whether the information or product is suitable for their purpose;
- assess and control any risks associated with the information or product; and
- obtain professional advice in relation to the use of the information or product.
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