

# Material Safety Data Sheet

## Hydrated Lime (CaOH<sub>2</sub>)

March 2019



### Section 1 – PRODUCT AND COMPANY INFORMATION

**Product Name** Calcium Hydroxide  
**Synonyms** Hydrate, Lime, Slaked Lime,  
**Appearance** White Powder  
**Odour** Odourless  
**Uses** Neutralization, Flocculation, Flux, Caustic Agent, Absorbent, PH correction, Lubricant, tanning, Agriculture

**Supplier information** Websters Hydrated Lime Co Ltd  
641 middle Rd  
P.O. Box 8046  
Havelock North  
Hawkes Bay  
(06) 8777617  
[www.whlc.co.nz](http://www.whlc.co.nz)

**Emergency Contact** National Poison Centre (0800) 764 766  
Websters Lime (06) 877 7617

### Section 2 – HAZARD IDENTIFICATION

**HSNO Classification** 6.3 Skin Irritant – Cat A  
8.3 Corrosive to ocular tissue – Cat A  
6.9 Specific target organ toxicity - Cat B  
9.1 Aquatic Eco toxicity – Cat D  
C.A.S. No. - 1305-62-0  
Poison Schedule - None Allocated  
Hazchem - None Allocated  
UN No. - None Allocated  
D.G. Class - None Allocated  
Pkg Group - None Allocated  
EPG None - Allocated  
Sub/Tert Risk - None Allocated

#### Health Hazards (corrosive)

Use safe work practices to avoid eye - skin contact and dust generation-summary inhalation. Once water is added an inhalation hazard is not anticipated.

**Respiratory effects** Are not anticipated with over exposure at high levels due to the immediate irritant and/or corrosive effects.

**Eye** Severe irritant. Exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage with prolonged contact.

**Inhalation** Over exposure to powder - dust (when mixing) may result in severe mucous membrane irritation of nose and throat, coughing and bronchitis at high levels.

**Skin Corrosive** Prolonged and repeated contact may result in skin rash, dermatitis and ulceration.

**Ingestion Corrosive** Ingestion may result in ulceration and burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhea.

**Flammability** Non flammable

**Reactivity** Incompatible (violently) with acids, maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane, water and phosphorus.

**Ventilation** Do Not Inhale Dust

### Section 3 – Composition Information on Ingredients

**Ingredients** Hydrated Lime – Calcium hydroxide – CaOH<sub>2</sub> – Slaked Lime

### Section 4 First Aid

**Eye Contamination** Get Medical help Immediately. Flush gently with running water, holding eyelids open under water for 20minute period. Lime burns must be treated by a medical practitioner.

**Symptoms** May Cause pain, burning, redness, watering, can cause serious eye damage

**Inhalation** If over exposure occurs leave exposure area immediately. If anything other than minor symptoms are displayed seek immediate medical attention.

**Symptoms** May Cause respiratory irritation and coughing

**Skin Exposure** Remove contaminated clothing and gently flush affected areas with plenty of water. Seek medical attention if irritation develops. Launder clothing before reuse.

**Symptoms** May Cause skin irritation, will feel pain, itching, irritation, blistering, and burns

**Ingestion** If poisoning occurs, contact a Doctor or Poisons Information Centre on (0800) 764 766. Seek immediate medical attention.

**Symptoms** stomach ache

If medical attention is necessary, ensure you inform them that lime is a strong Alkaline

### Section 5 Fire Fighting

**Suitable** Use any extinguisher suitable for the surrounding area..

**Flash point** Non Combustible

**General Hazard** Avoid breathing dust (caustic)

**Fire Equipment** Hydrated lime poses no fire- related hazard

**Combustion Products** N/A

### Section 6 Accidental Release

**Spillage** If spilt (bulk), contact emergency services where appropriate. Wear dust-proof goggles, PVC/rubber gloves, a Class P1 (Particulate) respirator (where an inhalation risk exists) coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. . Avoid generating dust.

**Environment** The aquatic toxicity of calcium hydroxide is due to it's alkalinity. It is neutralised to calcium carbonate by absorption of atmospheric carbon dioxide and is not degraded by oxidation. Calcium hydroxide does not bio accumulate in the environment.

**Spill Containment** Remove unspent containers from the area and approached spill area from a windward direction. Prevent material from entering sewers, drains and other confined spaces. If possible avoid any further contamination with water as it can set off a heat reaction. Safely remove any flammable material that may ignite. Sweep or vacuum up the excess material, do not create dust **DO NOT TRY AND HOSE AREA DOWN OR INTRODUCE ANY WATER.**

### Section 7 Handling and storage

**Safe handling** Ensure you are wearing correct PPE while working with this material once finished handling wash hands and forearms to remove any residual dust, ensure you use plenty of water and soap to avoid ingesting any hydrate. Avoid contamination do not get in eyes mouth, or on skin or clothing. Do not ingest or release to the environment.

**Safe Storage** Store in original container in a dry and well ventilated area. Store away from non compatible materials. Ensure the product remains dry and out of direct sunlight. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use. Storage Store in cool, dry, well ventilated area, removed from acids, maleic anhydride, nitroethane, nitromethane, nitroparaffin, nitropropane, phosphorus and foodstuffs. Waste Neutralise with dilute acid (eg. 3 mol/L hydrochloric acid) or similar. For small Disposal amounts absorb with sand or similar and dispose of to an approved landfill site. Transport Not regulated for transport purposes.

## Section 8 Exposure controls and personal protection

<b>Engineering controls</b>	If operation causes dust, fumes of gas, use process enclosures, local exhaust fans or other appropriate engineering controls to segregate dust from workers.
<b>Individual controls</b>	
<b>Hygiene</b>	Ensure you maintain high levels of personal hygiene when using material, wash hands and fore arms with soap and lots of water, remove contaminated clothes and wash as required. Ensure eyewash station and safety shower are available if needed.
<b>Respiratory</b>	Use a properly fitted, particulate filter. Filter selection must be based on anticipated exposure levels and sizing of material. Where an Inhalation risk exists, wear a Class P1 (Particulate) Respirator. At high dust levels wear a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter or a Full-face Class P3 (Particulate) respirator
<b>Hands</b>	Chemical resistant, impervious gloves, should be worn at all times when handling material, ensure burnt lime dose not enter the gloves or contaminate the cuffs as this may lead to skin irritation.
<b>Eyes</b>	Wear sealed goggles at all times while handling burn lime
<b>Skin</b>	Wear coveralls to limit skin exposure

## Section 9 Physical and Chemical Properties

<b>Flammability</b>	N/A
<b>Flash Point</b>	N/A
<b>Boiling Point</b>	N/A
<b>Melting Point</b>	N/A
<b>Exposure</b>	Std (TWA) 5 mg/m <sup>3</sup> Calcium hydroxide
<b>Evaporation Rate</b>	NON VOLATILE ph 12.4 %
<b>Volatiles</b>	N/A
<b>Specific Gravity</b>	2.24
<b>Solubility</b>	INSOLUBLE
<b>Vapor Pressure</b>	N/A
<b>Upper Explosion limit</b>	N/A
<b>Lower Explosion limit</b>	N/A
<b>Decomposition Temp</b>	580C AMBER

## Section 10 Stability and reactivity

<b>Reactivity</b>	Reacts violently with strong acids, reacts with water to form calcium hydroxide. During this reaction there will be excessive heat generated and dramatic change in bulk density.
<b>Chemical Stability</b>	The product is stable, absorbs moisture and Co <sub>2</sub> to create calcium hydroxide and calcium carbonate

## Section 11 Toxicology

<b>Exposure</b>	Dermal contact, eye contact, inhalation, ingestion.
<b>Acute toxicology</b>	N/A
<b>Irritation</b>	N/A
<b>Sensitisation</b>	N/A
<b>Health Effects</b>	
<b>General</b>	Causes damage to organs through prolonged repeat exposure
<b>Inhalation</b>	Repeat exposure can cause mucous membrane irritation, bronchitis and pneumonia
<b>Ingestion</b>	Repeat exposure can cause mucous membrane irritation, bronchitis and pneumonia
<b>Skin Contact</b>	Prolonged exposure and irritate skin
<b>Eye Contact</b>	Exposure can cause lens scratches, burns, and PH anomalies

## Section 12 Ecology

<b>Eco toxicity</b>	Toxic to aquatic life
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## Section 13 Disposal

**Disposal Methods** Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional requirements influencing the dumping of material.

## Section 14 Regulatory information

NZloc	All components are listed or exempt
HSNO #	Calcium Oxide: HSR002926
HSNO Group	N/A
HSNO Classification	6.3 skin irritant – Cat A 8.3 Corrosive of ocular tissue – Cat A 6.9 Specific Target Organ Toxicology – Cat B 9.1 Aquatic Eco toxicity – Cat D

