



# Material Safety Data Sheet

## Burnt Lime – from McDonald's Lime Limited

Material Safety Data Sheets are provided to assist the user in compliance with the Health and Safety in Employment Act 1992 and associated regulations.

### CHEMICAL DATA

#### Formula for McDonald's Burnt Lime:

McDonald's Burnt Lime consists of calcium oxide combined with small amounts of calcium carbonate and silica.

Burnt Lime is manufactured by heating calcium carbonate (limestone) to high temperature (greater than 1200°C) within a kiln system.

Product is supplied in different size gradings ranging from finely ground to coarse material as required.

### HAZARDS IDENTIFICATION

**Not classified as a dangerous good according to NZS 5433. The substance is classified as dangerous for air transport only.**

**UN No. 1910                      Hazchem Code 2X**

**HASNO Classes 8.2C, 8.3A, 9.1D**

**HASNO Approval No. 002926**

### PHYSICAL DATA

#### Appearance and Odour:

White, granular material; no odour

#### Boiling Point:

Not applicable, product is a powdered solid

#### Melting Point:

2570 - 2610°C

#### Vapour Pressure:

Not applicable, product is a powdered solid

#### Bulk Density:

1.1 – 1.2 tonnes/cubic metre

#### Solubility in water:

1.2g/l at 20°C

#### pH:

12.2 at 20°C

### STABILITY AND REACTIVITY

#### Stability:

Product is stable. Keep dry until used.

#### Reactivity:

Will react violently with water and acids releasing heat and steam. Mixtures with ethanol may ignite if heated and thus can cause an air-vapour explosion. Will react violently with mixtures of B<sub>2</sub>O<sub>3</sub> and CaCl<sub>2</sub>, interhalogens (e.g. BF<sub>3</sub>, ClF<sub>3</sub>), F<sub>2</sub>, HF, and P<sub>2</sub>O<sub>3</sub> and heat.

### FIRE FIGHTING MEASURES

Burnt Lime is non-flammable and non-explosive. However contact with water or acids may release sufficient heat to ignite surrounding combustible material. Control fires with large quantities of water (initial dousing will create steam, continue to apply water until steam stops). No hazardous decomposition products are expected during normal use of this product. Hazardous polymerisation will not occur.

### HEALTH HAZARD DATA

#### Acute:

Burnt Lime can dry the skin and cause caustic burns. Direct contact with the eyes can cause severe irritation; exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage. Inhalation can irritate the upper respiratory system causing coughing, and bronchitis at high levels. Ingestion by swallowing may result in ulceration-burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhoea.

#### Chronic:

Chronic respiratory effects are not expected to occur with over exposure at high levels due to the immediate irritant and/or corrosive effects. Hypersensitive individuals may develop allergic dermatitis.  
*This product contains small amounts of crystalline silica.* Long-term exposure to crystalline silica causes silicosis, a form of pulmonary fibrosis. Continued exposure to crystalline silica can lead to cardiopulmonary impairment. Symptoms are usually delayed (10 years or more).

## EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

Name	Formula	CAS number	Proportion	NZ-WES-TWA
Calcium Oxide	CaO	1305-78-8	95%	2mg/m <sup>3</sup> as inspirable dust
Calcium Carbonate	CaCO <sub>3</sub>	1317-65-3	1%	10mg/m <sup>3</sup> as inspirable dust 3mg/m <sup>3</sup> as respirable dust
Quartz	SiO <sub>2</sub>	14808-60-7	2.5%	0.2mg/m <sup>3</sup> as respirable dust
Cristobalite	SiO <sub>2</sub>	14464-46-1	0.3%	0.1mg/m <sup>3</sup> as respirable dust
Microcline	KAlSi <sub>3</sub> O <sub>8</sub>	1318-02-1	0.3%	10mg/m <sup>3</sup> as inspirable dust 3mg/m <sup>3</sup> as respirable dust
Albite	NaAlSi <sub>3</sub> O <sub>8</sub>	1344-00-9	0.3%	10mg/m <sup>3</sup> as inspirable dust 3mg/m <sup>3</sup> as respirable dust

### Respiratory Protection:

In dusty environments, an approved Class P1 or P2 particulate respirator is recommended.

### Ventilation:

An exhaust fan deducted from near point of generation can be used to control airborne dust levels. Dust levels and other discharge of dust should comply with Health and Safety in Employment Legislation, Resource Consents and any relevant District or Regional rules.

### Eye Protection:

Use tight fitting goggles or protective eyewear in dusty environments.

### Skin Protection:

Use barrier creams, impervious, abrasion and alkali resistant gloves, boots, and protective clothing to protect the skin from prolonged contact with wet dust. Immediately after working with wet dust, workers should shower with soap and water.

## EMERGENCY AND FIRST AID PROCEDURES

Pour clean water into eyes for at least 15 minutes and seek prompt medical attention; wash exposed skin areas with soap and plenty of water. If irritation develops seek medical attention; if ill effects due to inhalation, move person to fresh air. Keep warm, quiet and seek medical attention.

## SPILL PROCEDURES

Steps to be taken in case material is spilled; use dry clean up methods that do not disperse dust into the air. Avoid inhalation of dust and contact with skin. Emergency procedures are not required.

### Disposal method:

Small amounts of material can be disposed of as common waste or returned to the container for later use if not contaminated. Large amounts may require special handling. Material should be kept out of storm water or sewer drains, any discharge during clean up should comply with any relevant District or Regional Council Requirements.

## STORAGE AND HANDLING

The material should be kept free from moisture until used. Normal temperatures and pressures do not affect the material. Promptly remove dusty clothing or clothing which is wet with reject hydrate fluids and launder before reuse. Wash thoroughly after exposure to dust or wet reject hydrate mixtures or fluids.

NOTE: THIS MATERIAL SAFETY DATA SHEET ATTEMPTS TO DESCRIBE AS ACCURATELY AS POSSIBLE THE POTENTIAL EXPOSURES ASSOCIATED WITH NORMAL LIME USE. HEALTH AND SAFETY PRECAUTIONS IN THE DATA SHEET MAY NOT BE ADEQUATE FOR ALL INDIVIDUALS AND/OR SITUATIONS. USERS HAVE THE RESPONSIBILITY TO EVALUATE AND USE THIS PRODUCT SAFELY AND TO COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS. IF UNSURE OF ITS CURRENCY PLEASE CONTACT McDONALD'S LIME.

MANUFACTURER'S  
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**PRODUCT NAME AND  
SYNONYMS**

**Burnt Lime**  
Also referred to as:  
Lime, Quick Lime,  
Calcium Oxide.

**NATIONAL POISONS  
CENTRE**

Ph 0800 764 766

