

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name **HYDRATED LIME (BLUE CIRCLE SOUTHERN)**

Synonyms CALCIUM HYDRATE, CALCIUM HYDROXIDE, LIME HYDRATE, PLASTER LIME, SLAKED LIME.

Uses WATER TREATMENT, SOIL STABILISATION, NEUTRALISING AGENT, AGRICULTURAL LIMING, BINDER FOR MASONRY, PH CONTROL.

Supplier Name BLUE CIRCLE SOUTHERN CEMENT LIMITED
Address Clunies Ross Street, Prospect NSW, 2148, AUSTRALIA
Telephone (02) 9033 4000
Fax (02) 9033 4055
Emergency 1800 033 111

2. HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA
NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	Conc.	CAS No.
CALCIUM HYDROXIDE	Ca-O-H2	94 - 98%	1305-62-0
MAGNESIUM OXIDE	Mg-O	<1%	1309-48-4
SILICA, CRYSTALLINE - QUARTZ	Si-O2	<1%	14808-60-7
CALCIUM CARBONATE	Ca-C-O3	<2%	1317-65-3
MAGNESIUM HYDROXIDE	H2-Mg-O2	<1%	1309-42-8
CALCIUM OXIDE	Ca-O	<1%	1305-78-8
CALCINED CLAY		<5%	Not Available

4. FIRST AID MEASURES

- Eye** Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.
- Inhalation** If over exposure occurs leave exposure area immediately. If irritation persists, seek medical attention.
- Skin** Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.
- Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting.
- Advice To Doctor** Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability Non flammable. No fire or explosion hazard exists.

Fire and Explosion Non flammable. No fire or explosion hazard exists.

Extinguishing Non flammable.

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5. FIRE FIGHTING MEASURES cont.

Hazchem Code

None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage If spilt (bulk), contact emergency services if 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. Collect and place in sealable containers for disposal or reuse. Avoid generating dust.

7. HANDLING AND STORAGE

Handling Use safe work practices to avoid eye or skin contact and inhalation. Observe good personal hygiene. Prohibit eating, drinking and smoking in contaminated areas. Wash hands before eating. Remove contaminated clothing and protective equipment before entering eating areas.

Storage Store in cool, dry, well ventilated area, removed from moisture, oxidising agents (eg. hydrogen fluoride, phosphorus oxide), acids, ethanol, interhalogens (eg. chlorine trifluoride) and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use. Also store removed from maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropene and phosphorus.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation Do not inhale dust/ powder. Use with adequate natural ventilation. Where a dust inhalation hazard exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

Exposure Standards

CALCIUM HYDROXIDE (1305-62-0)
ES-TWA : 5 mg/m3

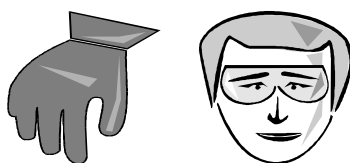
MAGNESIUM OXIDE (1309-48-4)
ES-TWA : 10 mg/m3 (fume)

SILICA, CRYSTALLINE - QUARTZ (14808-60-7)
ES-TWA : 0.1 mg/m3 (Silica Quartz, respirable, NOHSC)
ES-TWA# : 0.1 mg/m3 (QLD); 0.15 mg/m3 (NSW)

CALCIUM CARBONATE (1317-65-3)
ES-TWA : 10 mg/m3

CALCIUM OXIDE (1305-78-8)
ES-TWA : 2 mg/m3 (Peak level)

PPE Wear dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear coveralls. 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 Class P3 (Particulate) respirator.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: FINE WHITE POWDER
Odour: ODOURLESS
pH: 13
Vapour Pressure: NOT AVAILABLE
Vapour Density: NOT AVAILABLE
Boiling Point: 580 C
Melting Point: 580 C
Evaporation Rate: NOT AVAILABLE
Solubility (water): 1.6 g/L
Specific Gravity: 2.1 - 2.3
% Volatiles: NOT AVAILABLE
Flammability: NON FLAMMABLE
Flash Point: NOT RELEVANT
Upper Explosion Limit: NOT RELEVANT
Lower Explosion Limit: NOT RELEVANT
Autoignition Temperature: NOT AVAILABLE
Decomposition Temperature: 580 C
Density: 350 - 600 kg/m³ (Bulk)

10. STABILITY AND REACTIVITY

Reactivity Incompatible with oxidising agents (eg. phosphorus oxide, hydrogen fluoride), ethanol, interhalogens (eg. chlorine trifluoride) and acids. Also incompatible with maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropene and phosphorus.

Decomposition Products May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Corrosive. Use safe work practices to avoid eye - skin contact and dust generation-inhalation. Once water is added, an inhalation hazard is not anticipated. Chronic respiratory effects are not anticipated with over exposure at high levels due to the immediate irritant and/or corrosive effects. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). Crystalline silica can cause silicosis (lung disease) with chronic over exposure, however due to low levels present and product application, adverse health effects associated with this ingredient are greatly reduced.

Eye Corrosive. Severe irritant upon contact with powder/ dust. Over exposure may result in pain, redness, corneal burns and ulceration with possible permanent damage.

Inhalation Corrosive. 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 with powder or wetted form may result in skin rash and dermatitis.

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

Toxicity Data CALCIUM HYDROXIDE (1305-62-0)
LD50 (Ingestion) : 7300 mg/kg (mouse)

MAGNESIUM HYDROXIDE (1309-42-8)
LD50 (Ingestion) : 8500 mg/kg (rat, mouse)

12. ECOLOGICAL INFORMATION

Environment The aquatic toxicity of calcium hydroxide is due to its alkalinity. It is neutralised to calcium carbonate by absorption of atmospheric carbon dioxide and is not degraded by oxidation. Calcium hydroxide does not bioaccumulate in the environment.

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site. Contact the manufacturer for additional information.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

Transport Not classified as a Dangerous Good according to the Australian Code for the transport of Dangerous Goods by Road and Rail.

UN Number None Allocated

DG Class None Allocated

Subsidiary Risk(s) None Allocated

Packing Group None Allocated

Hazchem Code None Allocated

15. REGULATORY INFORMATION

Poison Schedule 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).

16. OTHER INFORMATION

Additional Information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

COLOUR RATING SYSTEM: Chem Alert reports are assigned a colour rating of Green, Amber or Red for the purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all Chem Alert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert 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. Information provided by Risk Management Technologies is summarised for ease of use. Additional technical information is available by calling +61 8 9322 1711.

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 a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

ABBREVIATIONS:

mg/m³ - Milligrams per cubic metre

ppm - Parts Per Million

TWA/ES - Time Weighted Average or Exposure Standard.

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.

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16. OTHER INFORMATION cont.

M - moles per litre, a unit of concentration.
IARC - International Agency for Research on Cancer.

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Report Status Chem Alert reports are compiled as an independent source of information by RMT's scientific department, based on the latest chemical and toxicological research and, where appropriate, in compliance with relevant standards, guidance notes and legislation. Where available the manufacturer's original MSDS is also provided to Chem Alert subscribers as a scanned image for their convenience. In many instances Chem Alert reports are compiled on behalf of manufacturers in which case they serve as the "Manufacturer's MSDS" and are clearly identified as such on the relevant reports.

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