

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name HYDRATED LIME

Synonym(s) CALCIUM HYDRATE • CALCIUM HYDROXIDE • GARDEN LIME • LIME HYDRATE • SLAKED LIME

1.2 Uses and uses advised against

Use(s) AGRICULTURAL APPLICATIONS • CONSTRUCTION • SOIL STABILISATION • WATER TREATMENT

1.3 Details of the supplier of the product

Supplier name WAGNER CEMENT PTY LTD

Address 47 Pamela St, Pinkenba, QLD, 4008, AUSTRALIA

Telephone 07 3621 1111

Fax 07 3621 1100

Website <http://www.wagner.com.au>

1.4 Emergency telephone number(s)

Emergency 13 11 26

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

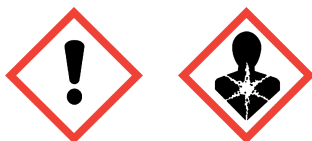
CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s) Skin Corrosion/Irritation: Category 2
Skin Sensitisation: Category 1
Serious Eye Damage / Eye Irritation: Category 2A
Specific Target Organ Systemic Toxicity (Single Exposure): Category 3
Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

2.2 Label elements

Signal word WARNING

Pictogram(s)



Hazard statement(s)

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
AUH066 Repeated exposure may cause skin dryness or cracking

Prevention statement(s)

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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Response statement(s)

| | |
|--------------------|--|
| 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 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P314 | Get medical advice/attention if you feel unwell. |
| P321 | Specific treatment is advised - see first aid instructions. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before re-use. |

Storage statement(s)

| | |
|-------------|--|
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |

Disposal statement(s)

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

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

| Ingredient | CAS Number | EC Number | Content |
|-----------------------------|------------|-----------|-----------|
| CALCIUM HYDROXIDE | 1305-62-0 | 215-137-3 | 90 to 95% |
| SILICON DIOXIDE | 7631-86-9 | 231-545-4 | <2% |
| ALUMINIUM OXIDE | 1344-28-1 | 215-691-6 | <1% |
| QUARTZ (CRYSTALLINE SILICA) | 14808-60-7 | 238-878-4 | <1% |
| MAGNESIUM OXIDE | 1309-48-4 | 215-171-9 | <3% |

4. FIRST AID MEASURES

4.1 Description of first aid measures

| | |
|-----------------------------|--|
| Eye | If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes. |
| Inhalation | If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. |
| Skin | If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor. |
| Ingestion | For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Rinse mouth out with water and give plenty of water to drink. |
| First aid facilities | Eye wash facilities and safety shower should be available. |

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

No fire or explosion hazard exists.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe 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.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters**Exposure standards**

| Ingredient | Reference | TWA | | STEL | |
|--------------------------------|-----------|-----|-------------------|------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Aluminium oxide (a) | SWA (AUS) | -- | 10 | -- | -- |
| Calcium hydroxide | SWA (AUS) | -- | 5 | -- | -- |
| Fumed silica (respirable dust) | SWA (AUS) | -- | 2 | -- | -- |
| Magnesium oxide (fume) | SWA (AUS) | -- | 10 | -- | -- |
| Quartz (respirable dust) | SWA (AUS) | -- | 0.1 | -- | -- |

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

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PPE

| | |
|--------------------|---|
| Eye / Face | Wear dust-proof goggles. |
| Hands | Wear PVC or rubber gloves. |
| Body | When using large quantities or where heavy contamination is likely, wear coveralls. |
| Respiratory | 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. |



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|----------------------------------|-------------------|
| Appearance | FINE WHITE POWDER |
| Odour | ODOURLESS |
| Flammability | NON FLAMMABLE |
| Flash point | NOT RELEVANT |
| Boiling point | NOT AVAILABLE |
| Melting point | NOT AVAILABLE |
| Evaporation rate | NOT AVAILABLE |
| pH | 12 |
| Vapour density | NOT AVAILABLE |
| Specific gravity | 2.2 to 2.8 |
| Solubility (water) | 1.6 g/L @ 20°C |
| Vapour pressure | NOT AVAILABLE |
| Upper explosion limit | NOT RELEVANT |
| Lower explosion limit | NOT RELEVANT |
| Partition coefficient | NOT AVAILABLE |
| Autoignition temperature | NOT AVAILABLE |
| Decomposition temperature | 580°C |
| Viscosity | NOT AVAILABLE |
| Explosive properties | NOT AVAILABLE |
| Oxidising properties | NOT AVAILABLE |
| Odour threshold | NOT AVAILABLE |

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid contact with incompatible substances.

10.5 Incompatible materials

Incompatible (violently) with acids (e.g. nitric acid), maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus.

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

PRODUCT NAME HYDRATED LIME

11.1 Information on toxicological effects

Acute toxicity

Information available for the product:

Based on available data, the classification criteria are not met.

Information available for the ingredient(s):

| Ingredient | Oral Toxicity (LD50) | Dermal Toxicity (LD50) | Inhalation Toxicity (LC50) |
|-------------------|----------------------|------------------------|----------------------------|
| CALCIUM HYDROXIDE | 7300 mg/kg (mouse) | -- | -- |
| ALUMINIUM OXIDE | > 5000 mg/kg (rat) | -- | -- |

| | |
|---------------------------------|---|
| Skin | Irritating to the skin. Contact with powder or wetted form may result in irritation, rash and dermatitis. |
| Eye | Irritating to the eyes. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage. |
| Sensitisation | May cause an allergic skin reaction. Not classified as causing respiratory sensitisation. However, some individuals may exhibit an allergic response upon exposure to cement, possibly due to trace amounts of chromium. |
| Mutagenicity | Insufficient data available to classify as a mutagen. |
| Carcinogenicity | This product contains crystalline silica and trace amounts of hexavalent chromium compounds which are classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer from exposure to crystalline silica is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk. |
| Reproductive | Insufficient data available to classify as a reproductive toxin. |
| STOT – single exposure | Irritating to the respiratory system. Over exposure may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties. |
| STOT – repeated exposure | Repeated exposure to respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibronodular lung disease caused by deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness. In the wet state, the likelihood of an inhalation hazard is reduced. |
| Aspiration | This product is a solid and aspiration hazards are not expected to occur. |

12. ECOLOGICAL INFORMATION

12.1 Toxicity

The aquatic toxicity of calcium hydroxide is due to its alkalinity.

12.2 Persistence and degradability

Neutralised to calcium carbonate by absorption of atmospheric carbon dioxide and is not degraded by oxidation.

12.3 Bioaccumulative potential

Calcium hydroxide does not bioaccumulate in the environment.

12.4 Mobility in soil

A low mobility would be expected in a landfill situation.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

| | |
|-----------------------|--|
| Waste disposal | Neutralise with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amounts, absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required). |
| Legislation | Dispose of in accordance with relevant local legislation. |

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

PRODUCT NAME HYDRATED LIME

| | LAND TRANSPORT (ADG) | SEA TRANSPORT (IMDG / IMO) | AIR TRANSPORT (IATA / ICAO) |
|------------------------------------|---------------------------------|---------------------------------------|--|
| 14.1 UN Number | None Allocated | None Allocated | None Allocated |
| 14.2 Proper Shipping Name | None Allocated | None Allocated | None Allocated |
| 14.3 Transport Hazard Class | None Allocated | None Allocated | None Allocated |
| 14.4 Packing Group | None Allocated | None Allocated | None Allocated |

14.5 Environmental hazards No information provided

14.6 Special precautions for user

Hazchem code None Allocated

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

Hazard codes Xi Irritant
Xn Harmful

Risk phrases R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitisation by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R66 Repeated exposure may cause skin dryness or cracking.

Safety phrases S22 Do not breathe dust.
S24/25 Avoid contact with skin and eyes.
S29 Do not empty into drains.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.

Inventory listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

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.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this 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 a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

