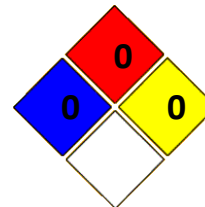


**Product Name:** Agricultural Lime

**Creation date:** 27 of May, 2020

**Revisión:** 05 of April, 2021

**NCh 2245 Of. 2015**



### SECTION N ° 1: IDENTIFICATION OF THE CHEMICAL PRODUCT AND OF THE COMPANY

|                                      |                                                                                 |
|--------------------------------------|---------------------------------------------------------------------------------|
| Chemical product identification:     | Calcium Carbonate.                                                              |
| Recommended uses:                    | Agricultural and industrial use, correction of acidified soils.                 |
| Uses advised against:                | Consumer use.                                                                   |
| Supplier's name:                     | Company Cal Austral S.A.                                                        |
| Supplier's address:                  | Puacura Rural S/N, Castro, Chiloé, Región de Los Lagos, Chile.                  |
| Supplier's Phone Number:             | +56652684839                                                                    |
| Emergency telephone number in Chile: | CITUC (Toxicology Information Center, Pontificia Universidad Católica de Chile) |
| CITUC Toxicological emergencies:     | +56226353800.                                                                   |
| CITUC Chemical emergencies:          | +56222473600.                                                                   |
| Cal Austral:                         | +56652684839.                                                                   |
| Supplier's email address:            | ventas@calaustral.com                                                           |

### SECTION N ° 2: HAZARDS IDENTIFICATION

|                                         |                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NCh 382 Classification:</b>          | Not Applicable.                                                                                                                                                                                                                                                                                                  |
| <b>NCh 2190 Badge:</b>                  | Not Applicable.                                                                                                                                                                                                                                                                                                  |
| <b>Classification according to GHS:</b> | <p>This product is not classified as dangerous for human health. It is basically harmless when handled correctly.</p> <p>Skin corrosion / irritation Category 2.<br/>           Serious eye damage / eye irritation Category 2B.<br/>           Specific target organ toxicity (single exposure) Category 3.</p> |



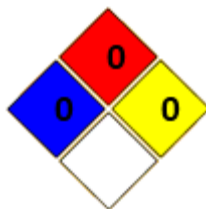
**GHS label:**

**Warning Word:** Harmful

**Hazard statements:** H315 Causes skin irritation.  
H320 Causes eye irritation.  
H335 May irritate the respiratory tract.

**Prevention:** P260 Avoid breathing dust.  
P264 Wash exposed skin carefully after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear gloves and eye protection equipment.

**Prudence advice:** P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P304 + P340 IF INHALED: Remove person from area to fresh air and keep in a position that facilitates breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses when present and can be easily removed. Continue washing if necessary.  
P310 Call immediately to UC TOXICOLOGY INFORMATION CENTER or a physician.  
P332+P313 In case of skin irritation, get medical attention if irritation persists.  
P337+P313 Get medical attention if eye irritation persists.  
P363 Wash contaminated clothing before reuse.



**Safety label according to NCh 1411/4:**

**Specific classification:** Non-hazardous substance.

**Specific badge:** Not Applicable.

**Hazard description:**

**Blue:** Degree of Health Hazard: Does not have.

**Red:** Degree of flammability: Does not have.

**Yellow:** Degree of Reactivity: Does not have.

**White:** Special Grades: Does not have.

**Description of specific hazards:** Not Applicable.

**Other hazards:** Not Applicable.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

**Systemic chemical name (IUPAC):** Calcium carbonate

**Common or generic name:** lime.

**CAS Number:** 1317-65-3

#### COMPOSITION

**Chemical formula:**  $\text{CaCO}_3$

**Equivalent Calcium carbonate ( $\text{CaCO}_3$ ):** 96.5%

#### METALS

|                       | Concentration | CAS Number |
|-----------------------|---------------|------------|
| Total Arsenic (As):   | < 2 ppm       | 7440-38-2  |
| Total Cadmium (Cd):   | < 0.5 ppm     | 7440-43-9  |
| Total Mercury (Hg):   | < 1 ppm       | 7439-97-6  |
| Total Lead (Pb):      | < 2 ppm       | 7439-92-1  |
| Total Boron (B):      | 20 ppm        | 7440-42-8  |
| Total Copper (Cu):    | 4 ppm         | 7440-50-8  |
| Potassium (K):        | 0.02 ppm      | 7440-09-7  |
| Magnesium (Mg):       | 0.08 ppm      | 7439-95-4  |
| Sodium (Na):          | 0.47 ppm      | 7440-23-5  |
| Total Phosphorus (P): | 460 ppm       | 7723-14-0  |
| Total Strontium (Sr): | 1020 ppm      | 7440-24-6  |

### SECTION N ° 4: FIRST AID MEASURES

#### IN CASE OF ACCIDENTAL CONTACT WITH THE PRODUCT, PROCEED AS FOLLOWS:

**General measures:** Remove contaminated clothing, avoid contact with eyes and skin. In case of consciousness loss hold and transport the victim in a stable, lateral and lying position. Get medical attention and show label to the physician.

**Inhalation:** If inhaled, remove from area to fresh air. Let the person breathe calmly. If not breathing or if breathing with difficulty supply oxygen. Keep the victim warm and at rest. Get immediate medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation persists.

**Eye contact:** Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**Ingestion:** Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur and show SDS to the physician.

**Expected acute effects:**

**Inhalation:** In high concentrations it can cause nausea, dizziness and nasal irritation.

**Ingestion:** The product does not present toxicity, avoid consuming, non-eatable product.

**Eye contact:** Severe irritation.

**Skin contact:** May cause redness and / or irritation.

**Expected delayed effects:** Chronic ingestion may cause hypercalcemia, alkalosis and kidney damage.

**Most important symptoms / effects:** Not Applicable.

**Protection of first aid providers, specific notes for the attending physician:** None.

**Never give drinks to a person who is unconscious. Get medical attention if necessary.**

#### **SECTION N ° 5: FIRE - FIGHTING MEASURES**

**Extinguishing media:** The product is not flammable, use suitable extinguishers for the surrounding fire.

**Inappropriate extinguishing media:** Waterjet.

**Hazardous combustion products and thermal degradation:** In case of fire, carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) may be formed.

**Associated specific hazards:** No risks under normal conditions.

**Specific extinguishing methods:** water spray, foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>) or sand.

**Precautions for emergency personnel and / or firefighters:** Only suitable equipment to fight the fire.

## SECTION N ° 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear appropriate personal protective equipment (safety glasses, gloves, and dust Respirator).

**Personal protective equipment and emergency procedures:** Wear appropriate personal protective equipment (safety glasses, gloves and 3m 7093 P100 dust Respirator).

**Environmental precautions:** does not affect the environment, product designed for stabilization and balance of pH in soils.

**Methods and materials for containment, confinement and / or abatement:** Prevent further leakage or spillage if safe to do so.

**Methods and materials for cleaning, recovery, neutralization and final disposal:**

**If the material is not contaminated:** Do not sweep it dry. Proceed with its collection, with a practice that eliminates the generation of dust (which may include wet methods), and proceed to deposit it in appropriate containers for normal use. If you get it damp or wet, take the necessary precautions as the product behaves like a slippery material.

**If the material is contaminated:** Proceed to determine the substance that contaminates it and use the appropriate personal protective equipment and methods to collect it in appropriate containers, for shipment to authorized confinement by the corresponding authorities if necessary.

**Additional disaster prevention measures (collateral effects):** Not Applicable.

## SECTION N ° 7: HANDLING AND STORAGE

**Precautions for safe handling:** Wear appropriate personal protective equipment (safety glasses, gloves and 3m 7093 P100 dust respirator).

**Operational and technical measures for exposure prevention:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid dust formation. Use good work and personal hygiene practices to avoid exposure. When using do not smoke, eat or drink. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing.

**Other precautions (ventilation):** Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

**Contact prevention with incompatible substances:** Not Applicable.

**Safe storage conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture.

**Incompatible substances and mixtures:** Not Applicable.

**Recommended container and packaging material:** Use resistant containers or containers for powders.

## SECTION N ° 8: PERSONAL PROTECTION

**Maximum allowable concentration:** TWA: 2 ppm for 8 hours.  
TWA: 5 mg/m<sup>3</sup> for 8 hours.

**Personal protective equipment:**

**Respiratory protection:** Use respiratory protection with activated carbon filter or P 95 particulate filters.

**Hand protection:** Chemical resistant gloves should be used. Use protective gloves made of: Nitrile, Neoprene, PVC.

**Eye protection:** Wear Safety Glasses with Side-shields when handling any chemical.

**Skin and body protection:** Wear suitable protective clothing (disposable overall or full suit).

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required.

**Hygiene measures:** Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing before re-use.

## SECTION N ° 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Solid.

**Appearance** Powder dust.

**Colour:** White.

**Odor:** Odorless

**Odor threshold:** Not applicable

**Concentration:** 96.5 %

**pH:** 8,2.

**Humidity:** 0.16 %.

**Relative Efficiency:** 99.8 %.

**Total relative neutralizing power (T.R.N.P):** 96.3 %.

**Boiling point:** 1339°C

**Flammability point:** The product is not flammable or combustible.

**Autoignition temperature:** No information available

**Flammability Limits:** Not applicable.  
**Vapor pressure:** 0 hPa (20°C).  
**Vapor relative density:** No information available.  
**Density:** 2,93 g/cm<sup>3</sup>.  
**Solubility in water:** 0,0013 g/100 mL (25° C)

#### SECTION N ° 10: STABILITY AND REACTIVITY

**Chemical stability:** This material is considered stable under recommended conditions.  
**Conditions to avoid:** Direct sunlight. Extremely high or low temperatures. Protect from moisture.  
**Incompatible materials:** Strong acids, strong oxidants.  
**Hazardous decomposition products:** None.  
**Hazardous combustion products:** carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).  
**Intended use and misuse:** Not applicable  
**Possibility of hazardous reactions:** Reacts violently in contact with acids.

#### SECTION N ° 11: TOXICOLOGICAL INFORMATION

|                                                                                         |                                                                                                              |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Acute toxicity (LD50):</b>                                                           | 6450 mg/kg (oral, rats).                                                                                     |
| <b>Skin corrosion / irritation:</b>                                                     | Irritating to skin at short distance and direct exposure.                                                    |
| <b>Serious eye damage / eye irritation:</b>                                             | Irritating to eyes at short distance and direct exposure.                                                    |
| <b>Respiratory or skin sensitization:</b>                                               | Cough and / or irritation of the respiratory tract to direct exposure and short distance. Dermal sensitizer. |
| <b>Reproductive / in vitro cell mutagenicity:</b>                                       | Unknown significant effects or critical hazards.                                                             |
| <b>Carcinogenicity:</b>                                                                 | Unknown significant effects or critical hazards.                                                             |
| <b>Reproductive toxicity, specific to particular organs, single, repeated exposure:</b> | Not mutagenic.                                                                                               |
| <b>Inhalation Hazard:</b>                                                               | Cough and / or irritation of the respiratory tract to direct exposure and short distance.                    |

#### SECTION N ° 12: ECOLOGICAL INFORMATION

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| <b>Ecotoxicidad (EC, IC, LC):</b>   | This product is not considered toxic. |
| <b>Persistencia/degradabilidad:</b> | Not Applicable - Inorganic chemical.  |
| <b>Potencial Bioacumulativo:</b>    | Not Applicable - Inorganic chemical.  |
| <b>Movilidad en suelo:</b>          | Insoluble in water                    |

### SECTION N ° 13: FINAL DISPOSAL INFORMATION

**Recommended methods approved by Chilean regulations for safe final disposal:** Aspiration to appropriate containers for reuse.

**Recommended methods approved by Chilean regulations for contaminated containers / packaging disposal:** Avoid or minimize waste generation whenever possible. Dispose product waste and its containers with all possible precautions. Avoid dispersal of spilled material, contact with soil, waterways, drain pipes and sewers. In case of disposal, it must be considered as a hazardous waste according to the D.S. 148/2004, and dispose of in accordance with the provisions of said article. Transport according to the provisions of the D.S. 298/1995. Incineration or burial should only be considered when recycling is not feasible. Dispose of through a licensed contractor. Waste packaging should be recycled whenever possible.

### SECTION N °14: TRANSPORT INFORMATION

Not classified as dangerous to transport.

**Regulations:** Land (DS 298)                      Sea (IMDG Code)                      Air (IATA)

**UN Number:** Not Applicable.

**Official transport designation:** Calcium Carbonate 96% w/w.

**Main hazards clasification:** Not Applicable.

**Secondary hazard clasification:** Not Applicable.

**Packing / container group:** Not Applicable.

**Environmental hazards:** Not Applicable.

**Packaging / Container:** Does not require a label, do not transport with incompatible materials such as acids and / or strong oxidants.

**Land Transportation:** by road, preferably in bulk in silo trucks with pneumatic unloading. Product packed in trucks with railing and tent.

**Applicable badges NCh 2190 Of. 2003:** Not Applicable.

## SECTION N ° 15: REGULATORY INFORMATION

**Applicable international standards:** OSHA, ACGIH, ASTM, ANFP, HMIS, NIOSH

**Applicable national standards:** D.S 298, 594, NCh 382, NCh 1411 y NCh 2190.

**Mark on label:** Not Applicable.

## SECTION N ° 16: OTHER INFORMATION

Isolate from meteorological conditions (rain).

**NFPA** Health Hazard 1 Flammability 0 Reactivity 0 Physical and Chemical Hazards -

**HMIS** Health Hazard 1 Flammability 0 Physical Hazard 0 Personal Protection E & G



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**Reviewed by:** Biochemist, MSc. Juan Pablo Cuevas G. This latest version was updated according to the guidelines of NCh 2245 Of. 2015.

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**Last revision date:** Abril of 2021.

**Next revision date:** May of 2021.

### DISCLAIMER

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