



# SAFETY DATA SHEET

According to 29 CFR 1910.1200

## CALCIUM HYDROXIDE

Date of issue: September 01, 2023 Revision date: - Version: 1

### SECTION 1.- IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### 1.1 Product identifier

**Product form** Solid  
**Substance name** Calcium hydroxide  
**CAS No.** 1305-62-0  
**Formula** Ca(OH)<sub>2</sub>  
**Synonyms** Slaked lime, lime hydrate, milk of lime, calcium(II) hydroxide, pickling lime, portlandite, hydrated lime, calcium dihydroxide.

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use of the substance/mixture** Fertilizers

#### 1.3 Details of the supplier of the safety data sheet

Química Pima, S.A. de C.V.  
Del Cobre 20, Parque Industrial Hermosillo  
Hermosillo, Sonora, México. C.P. 83297 Tel. 011 (662) 251-0010 / (662) 251-0316  
ventas@qpima.com  
www.qpima.com

#### 1.4 Emergency telephone number

**Emergency number** CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

### SECTION 2.- HAZARD IDENTIFICATION

#### 2.1 GHS-US classification

Skin Corrosion/Irritation	2	H315
Serious Eye Damage/Eye Irritation	1	H318
Hazardous to Aquatic Environment (Acute)	3	H335

#### 2.2 Label elements

##### GHS-US labelling

##### Hazard pictograms (GHS-US)



##### Signal Word (GHS-US):

Danger

##### Hazard statement (GHS-US):

H315 Get immediate medical advice/attention.

H318 Causes serious eye damage.

H335 Brush off loose particles from skin.

##### Precautionary statements (GHS-US):

P101 If medical advice is needed, have a product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash your hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.



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P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P304+P340 IF INHALED: Remove person to fresh air and keep 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.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of the contents/container following federal, state, and local laws.

No data available  
Not applicable

### 2.3 Other hazards

### 2.4 Unknown acute toxicity (GHS-US)

## SECCIÓN 3.- COMPOSITION / INFORMATION OF INGREDIENTS

### 3.1 Substance

Name	Product identifier	%
Calcium hydroxide	(CAS No.) 1305-62-0	> 72

### 3.2 Mixture

Not applicable

No additional ingredients are present that, to the best of the supplier's knowledge and in applicable concentrations, are classified as hazardous to health or the environment, and therefore they do not need to be reported in this section. Occupational exposure limits, if applicable, are listed in section 8.

## SECCIÓN 4.- FIRST AID MEASURE

### 4.1 Description of first aid measure

#### First-aid measures general

Check vital signs. Unconscious: keep airways clear and provide breathing assistance. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform CPR. Conscious victim with breathing difficulty: semi-upright position. Victim in shock: lying on back with legs slightly elevated. Vomiting: prevent choking or aspiration. Avoid cooling by covering the victim (without heating). Continue monitoring the victim. Provide psychological support. Keep the victim calm, and avoid physical strain. Depending on the victim's condition: seek medical attention/hospital. Never give anything by mouth to an unconscious person. If feeling unwell, seek medical attention (if possible, show the label).

#### First-aid measures after eye contact

Immediately rinse with plenty of water for 15 minutes. Do not apply neutralizing agents. Take the victim to an ophthalmologist immediately.



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<b>First-aid measures after skin contact</b>	Immediately wash with plenty of water. Take the victim to a doctor if irritation persists. Do not apply chemical agents (neutralizers). Do not remove clothing if it sticks to the skin. Cover wounds with a sterile dressing. Consult a doctor/medical service. If the burned area is > 10%: take the victim to the hospital.
<b>First-aid measures after inhalation</b>	Remove the victim to fresh air. If respiratory problems occur: consult a doctor/medical service.
<b>First-aid measures after ingestion</b>	Rinse mouth with water. Immediately after ingestion: give plenty of water to drink. Do not induce vomiting. Call a Poison Control Center. Consult a doctor/medical service if the person starts feeling unwell. If ingestion is of large amounts: take to hospital immediately. Take container/vomit to doctor/hospital.

### 4.2 Most important

<b>Symptoms/injuries after inhalation</b>	Coughing. Irritation of the respiratory tract. Irritation of nasal mucous membranes. Difficulty breathing.
<b>Symptoms/injuries after skin contact</b>	Redness of the skin. Tingling/irritation of the skin. THE FOLLOWING SYMPTOMS MAY APPEAR LATER: Blisters. IN CONTINUOUS EXPOSURE/CONTACT: Caustic burns/corrosion of the skin.
<b>Symptoms/injuries after eye contact</b>	Severe eye damage. Eye exposures may cause burns to the eyelids, conjunctivitis, corneal edema, corneal burn, corneal perforation, damage to eye contents, permanent visual defects, and blindness and/or loss of the eye.
<b>Symptoms/injuries after ingestión</b>	Effects on the gastrointestinal tract: Ingestion exposure can cause irritation, inflammation, and perforation of the upper gastrointestinal tissues. Permanent scarring may occur.
<b>Chronic symptoms</b>	Skin rash/inflammation.

### 4.3 Indications of any immediate medical attention and special treatment needed

Symptomatic treatment.

## SECCIÓN 5.- FIREFIGHTING MEASURES

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Use multipurpose foam, dry chemical powder, or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Water

### 5.2 Special hazard arising from the substance or mixture

<b>Fire hazard</b>	Reacts upon exposure to water with metals: release of highly flammable gases/vapors (hydrogen).
<b>Explosion hazard</b>	See section 10.
<b>Reactivity</b>	See section 10.

### 5.3 Advice for firefighters

<b>Precautionary measures fire</b>	Reacts upon exposure to water with metals
<b>Firefighting instructions</b>	If it is safe to do so, remove the container from the fire area. Cool containers with water spray. Do not apply water directly to this product. Heat is generated when mixed with water. Avoid skin contact.
<b>Protection during firefighting</b>	Use an approved NIOSH self-contained breathing apparatus operated in the demand pressure mode.

## SECCIÓN 6.- ACCIDENTAL RELEASE MEASURES



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### 6.1 Personal precautions, protective equipment, and emergency procedures

#### 6.1.1 For non-emergency personnel

Protective equipment	Gloves. Face shield. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust suit.
Emergency procedures	Wash contaminated clothing. In case of hazardous reactions: stay upwind. In case of reactivity risk: consider evacuation. Do not attempt to act or respond to an emergency without appropriate protective equipment.
Measures in case of dust release	Prevent dust cloud formation. Dust cloud production: dust suit. In case of dust production: stay upwind. Close doors and windows of facilities.

#### 6.1.2 For emergency responders

Mark the hazard area. Prevent dust cloud formation. Do not create open flames. For more information, refer to Section 8: "Exposure Controls/Personal Protection".

### 6.2 Environmental precautions

Avoid release to the environment. Avoid entry into sewers and public waters.

### 6.3 Methods and material for containment and cleaning up

#### Method for containment

If possible, confine the spilled material. Completely contain the spill with dikes, sandbags, etc. After containment, collect the spilled material and transfer it to a chemical waste area. Keep incompatible materials away. Ventilate and contain the spill to prevent spreading. In the event of a spill or leak, stop the leak as soon as possible. Liquid substances can be removed with a vacuum truck. The recovered product should be transferred to appropriate and compatible containers. Close and label them.

#### Method for cleaning up

Stop the dust cloud by covering it with sand/earth. Collect the solid spill in sealable containers. Small amounts of liquid spill: neutralize with an acidic solution. Wash the neutralized product with plenty of water. Wash clothing and equipment after handling.

### 6.4 Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection

## SECTION 7.- HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Precautions for safe handling

Comply with legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Use corrosion-resistant equipment. Thoroughly clean/dry the facility before use. Do not discharge waste into drains. Avoid raising dust. Keep away from flames/heat. Maintain strict hygiene. Keep the container tightly closed. Regularly measure air concentration. Conduct operations outdoors/with local ventilation or respiratory protection.

#### Hygiene measures

Do not eat, drink, or smoke while using this product. Wash hands, forearms, and face thoroughly after handling chemicals, before eating, smoking, and using the restroom, and at the end of the work period. Use appropriate techniques to remove contaminated clothing. Wash contaminated clothes before reusing them. Ensure that eye wash stations and safety showers are located near workstations.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Store and handle following all current standards and regulations. Keep the container securely closed and properly labeled. Keep separate from incompatible substances (see Section 10 of the Safety Data Sheet).



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### Incompatible products

Incompatible substances and mixtures: Strong acids, fluorine, organic materials, amines, water/moisture. Store at temperatures above 5°C. Avoid sources of ignition.

### Heat-ignition

Reacts upon exposure to water with metals: release of highly flammable gases/vapors (hydrogen).

### Storage area

Store in a dry area.

### Special rules on packaging

Keep the container tightly closed when not in use. Store in a tightly sealed, dry, clean, and properly labeled container. Comply with applicable regulatory requirements.

### Packaging materials

Stainless steel, iron, paper, polyethylene. Material to avoid: aluminum, zinc.

### 7.3 Specific end use(s)

No additional information is available

## SECTION 8.- EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium hydroxide 1305-62-0	5.0 mg/m <sup>3</sup>	5.0 mg/m <sup>3</sup>	No data available

### 8.2 Exposure controls

#### Appropriate engineering controls

Use local exhaust ventilation where dust or vapor may be generated. Ensure compliance with appropriate exposure limits. Install an emergency eye wash station and a pressure shower in the immediate work area.

#### Personal protective equipment

Safety goggles, face shield, gloves, and respirator with high-efficiency particulate air (HEPA) cartridges or P2-type filters in certain circumstances

#### Material for protective clothing

Neoprene, PVC.

#### Hand protection

Use appropriate gloves resistant to chemicals, such as neoprene or PVC gloves with long cuffs. Consult with a glove supplier for advice when selecting suitable chemical-resistant gloves.

#### Eye protection

Use chemical splash goggles with a face shield to protect against eye and skin contact.

#### Skin and body protection

Use protective clothing to minimize skin contact. When there is a possibility of contact with wet material, use Tychem or a similar chemical protective suit. When there is a possibility of contact with dry material, use disposable coveralls suitable for dust exposure, such as Tyvek. Always tuck pants into boots. Wash and fully dry contaminated garments before reuse. Discard contaminated leather materials.

Before handling this product, appropriate footwear and any additional skin protection measures should be chosen based on the task being performed and associated risks, with approval from a specialist. Recommended: chemical-resistant, neoprene, PVC footwear. Contact your protective equipment supplier to verify equipment compatibility for the intended purpose.

#### Respiratory protection

It may be permissible to use an approved respirator with high-efficiency particulate air (HEPA) cartridges or P2-type filters in certain circumstances where it is anticipated that airborne concentrations may exceed exposure limits or when symptoms indicative of overexposure have been observed. When workplace conditions warrant the use of a respirator, a respiratory protection program complying with applicable regulatory requirements should be followed.

#### Environmental exposure controls

Avoid release to the environment.



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### SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	White to slightly yellow.
Odor	Odorless
Color	Colorless
Molecular mass	74.09 g/mol
Odor threshold	No data available
pH	12.4
pH solution	2%
Relative evaporation rate (butyl acetate = 1)	No data available
Melting/Freezing point	580 °C
Boiling point	No data available
Flash point	No data available
Self-ignition temperature	> 400 °C
Decomposition temperature	580 °C
Flammability (solid, gas)	No data available
Vapor pressure	< 0.1 hPa
Relative vapor density at 20 °C	No data available
Relative density	No data available
Solubility	Glycerol, acid.
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

#### 9.2 Other information

No additional information is available

### SECTION 10.- STABILITY AND REACTIVITY

10.1 Reactivity	It decomposes in humid air. Absorbs atmospheric CO <sub>2</sub> . Reacts violently with (some) acids: release of heat. Reacts upon exposure to water (moisture) with (some) metals: release of highly flammable gases/vapors (hydrogen).
10.2 Chemical stability	It absorbs atmospheric CO <sub>2</sub> . Unstable upon exposure to air. Unstable upon exposure to moisture. Hygroscopic.
10.3 Possibility of hazardous reactions	No hazardous reactions are known under normal conditions of use.
10.4 Conditions to avoid	None under recommended storage and handling conditions (see section 7).
10.5 Incompatible materials	Acids, fluorides
10.6 Hazardous decomposition products	None under recommended storage and handling conditions



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### SECTION 11.- TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Likely routes of exposure	Skin and eye contact, inhalation, and ingestion.
Acute toxicity	Nausea, vomiting abdominal pain, diarrhea. Burns to gastric/intestinal mucosa.
Skin corrosión/irritation	Redness of the skin. Tingling/irritation of the skin. THE FOLLOWING SYMPTOMS MAY APPEAR LATER: Blisters. WITH CONTINUED EXPOSURE/CONTACT: Caustic burns/corrosion of the skin.
Serious eye damage/irritation	Corrosion of ocular tissue.
Respiratory or skin sensitization	Coughing, irritation of the respiratory tract, irritation of nasal mucous membranes, respiratory difficulties.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target toxicity (single exposure)	Irritation of the respiratory tract
Specific target toxicity (repeat exposure)	No data available
Aspiration hazard	No data available

Name	LD <sub>50</sub> oral	LD <sub>50</sub> dermal	LC <sub>50</sub> inhalation
Calcium hydroxide	7340 mg/kg (rat)	> 2500 mg/kg (rabbit)	No data available

### SECTION 12.- ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Ecology – General	Classification concerning the environment: not applicable.
Ecology – Air	Not classified as dangerous for the ozone layer.
Ecology – Water	Maximum concentration in drinking water: 270 mg/l (calcium) (M.B. 28/1/2003). Harmful to invertebrates. Slightly harmful to algae (EC <sub>50</sub> : 100 – 1000 mg/l, 72h). Cause pH change and inhibition of activated sludge.

#### 12.2 Persistence and degradability

Adsorbs to soil.

#### 12.3 Bioaccumulative potential

Not bioaccumulable.

#### 12.4 Mobility in soil

No data available

#### 12.5 Other adverse effects

Other information

### SECCIÓN 13.- INFORMACIÓN RELATIVA A LA ELIMINACIÓN DE LOS PRODUCTOS

#### 13.1 Waste treatment methods

Waste treatment methods	Waste should not be disposed of untreated down the drain unless it is compatible with the requirements of all relevant authorities.
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Waste disposal recommendations

Waste generation should be avoided or minimized whenever possible. The disposal of this product, its solutions, and any derivatives must always comply with environmental protection legislation and waste disposal requirements and all requirements of local authorities. Dispose of excess and non-recyclable products through a licensed contractor for disposal. Avoid the dispersion of spilled material, and its contact with soil, aquatic environments, drains, and sewers. Dispose of product residues and containers with all possible precautions. Exercise caution when handling empty containers that have not been cleaned or rinsed. Empty containers or liners may retain product residues.

## SECTION 14.- TRANSPORT INFORMATION

14.1 UN Number	Unregulated
14.2 UN proper shipping name	Unregulated
14.3 Class of hazards in transportation	Unregulated
14.4 Packaging group	Unregulated
14.3 Additional information	
Other information	No supplementary information is available.
Overland transport	No additional information is available.
Transport by sea	No additional information is available.
Air transport	No additional information is available.

## SECTION 15.- REGULATORY INFORMATION

### International inventories

TSCA All components are listed or exempt.

TSCA – Toxic Substances Control Act Inventory Section 8(b).

DSL/NDSL - Domestic Substance List/Non-Domestic Substance List.

**US Federal Regulations:** Not listed in the Toxic Substances Control Act Inventory

### SARA 311/312 Categories.

Acute Health Hazard	Yes	Chronic Health Hazard	No	Fire Hazard	No
Sudden Hazardous Pressure Release	No	Reactive Hazard	No		

**Clean Water Act.** No data available

**CERCLA.** No data available

## SECTION 16.- OTHER INFORMATION

<b>NFPA</b>	NFPA health Hazard	3	NFPA fire Hazard	0	NFPA instability Hazard	0	NFPA Special hazard	-
<b>HMIS III</b>	Health	3	Flammability	0	Physical	0	Personal protection	F

Splash goggles, gloves, apron, and vapor respirator.

F



**Made for:** Química Pima, S.A. de C.V. Del Cobre No. 20 Parque Industrial. Hermosillo, Sonora, México. 83297.

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Revision note: -

*IMPORTANT NOTE: Information in this SDS is from available published sources and is believed to be accurate, but is not exhaustive and will be used only as a guide, which is based on current knowledge of the chemical substance or mixture and applied to the appropriate product for safety precautions. No warranty, express or implied, is made and Pima Chemicals & Fertilizers, LLC and Quimica Pima, S.A. de C.V. assumes no liability resulting from the use of this SDS. The user must determine the suitability of this information for his application.*

End of Safety Data Sheet