



SAFETY DATA SHEET

According to 29 CFR 1910.1200

CALCIUM OXIDE

Date of issue:

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Version:

1

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

1.1 Product identifier

Product form	Solid
Substance name	Calcium oxide
CAS No.	1305-78-8
Formula	CaO
Synonyms	Quicklime, lime.

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

Use of the substance/mixture According to the Product Technical Data Sheet:

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

ventas@qpima.com

www.qpima.com

Tel. 011 (662) 251-0010 / (662) 251-0316

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.
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.

2.3 Other hazards

No data available

2.4 Unknown acute toxicity (GHS-US)

No data available

SECCIÓN 3.- COMPOSITION / INFORMATION OF INGREDIENTS

3.1 Substance

Name	Product identifier	%
Calcium oxide	(CAS No.) 1305-78-8	> 90

3.2 Mixture

Not applicable

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

Wash immediately with water for an extended period (at least 15 minutes), keeping eyelids open. Seek medical attention immediately.

First-aid measures after skin contact

Remove contaminated clothing and immediately wash the entire exposed skin area with plenty of water. If discomfort occurs or in case of doubt, consult a physician.

First-aid measures after inhalation

If inhaled, move to fresh air and keep in a comfortable position for breathing. Administer oxygen or perform artificial respiration if necessary. If discomfort occurs or in case of doubt, consult a physician.



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First-aid measures after ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Drink plenty of water. Call a doctor if the person feels unwell.

4.2 Most important

Symptoms/injuries after inhalation

Coughing, headache, choking.

Symptoms/injuries after skin contact

Irritation.

Symptoms/injuries after eye contact

Risk of blindness, corneal opacity, risk of severe eye injury.

Symptoms/injuries after ingestión

Dizziness, vomiting, coughing, nausea, headache

Chronic symptoms

No data available.

4.3 Indications of any immediate medical attention and special treatment needed

No data available

SECCIÓN 5.- FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Foam. Dry chemical powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media

Do not use direct water stream.

5.2 Special hazard arising from the substance or mixture

Fire hazard

No data available.

Explosion hazard

See section 10.

Reactivity

See section 10.

5.3 Advice for firefighters

Precautionary measures fire

No data available.

Firefighting instructions

Stay upwind. Do not allow extinguishing waters to enter sewers or waterways. Evacuate unnecessary personnel.

Protection during firefighting

Use full firefighting gear and self-contained breathing apparatus (SCBA).

SECCIÓN 6.- ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment

See section 8.

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

Use appropriate protective equipment (see section 8) to prevent any possible contamination of the skin, eyes, and clothing. Avoid contact with skin, eyes, and clothing.

6.2 Environmental precautions

Keep the product away from drains and surface or groundwater. Contain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Method for containment

Contain and collect any contaminated material, avoiding the generation of dust. Prevent runoff into sewers, waterways, or disposal in areas where surface or groundwater may be affected.

Method for cleaning up

Contaminated material should be placed in a container for disposal following local regulations (refer to section 13).



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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

Avoid contact with skin and eyes. Prevent the formation of dust. Provide adequate ventilation in areas where vapors, aerosols, fumes, or dust may form. Keep away from ignition sources. No smoking. Keep away from heat and ignition sources. Take normal preventive fire protection measures. Avoid the accumulation of electrostatic charges.

Hygiene measures

While in use, eating, drinking, or smoking is prohibited. Wash hands and/or face before breaks and at the end of work. Gloves should be regularly checked and inspected before use. Replace if necessary (e.g., if small holes are present). Remove contaminated clothing immediately. Wash contaminated clothing before reuse. Store work clothing separately.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store only in the original container in a cool, well-ventilated area, away from incompatible materials. Keep the container tightly closed when not in use. Recommended storage temperature: 15 – 25°C.

Incompatible products

See section 10.

Heat-ignition

No data available.

Storage area

Store only in the original container in a cool, well-ventilated area, away from incompatible materials. Recommended storage temperature: 15 – 25°C.

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

No data available

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 oxide 1305-78-8	No data available	No data available	No data available

8.2 Exposure controls

Appropriate engineering controls

Eye wash stations and safety showers should be available nearby during use/handling. Provide exhaust ventilation or other engineering controls to keep vapor or dust concentrations (total/respirable) below the applicable occupational exposure limits indicated above. It is recommended that all dust control equipment such as local ventilation and material handling systems involved in handling this product contain explosion relief vents an explosion suppression system or an oxygen-deficient atmosphere. Ensure that dust handling systems (such as exhaust ducts, dust collectors, containers, and processing equipment) are designed to prevent dust from escaping into the work area (i.e., no equipment leaks).

Personal protective equipment

Protective goggles with side shields, gloves, body protection, apron, protective boots, protective suit, head protection, and particle filter.

Material for protective clothing

Nitrile rubber.



Hand protection

Eye protection

Skin and body protection

Respiratory protection

Environmental exposure controls

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Use appropriate gloves. Suitable gloves are chemically resistant gloves tested for this purpose. For special uses, it is recommended to verify with the supplier of the protective gloves regarding their resistance to the above-mentioned chemicals. Material type: NBR (Nitrile rubber). Material thickness: >0.11 mm. Permeation: level 6 (> 480 minutes).

Use protective goggles with side shields.

Select body protection depending on the activity and potential exposure, e.g., apron, protective boots, chemical-resistant protective suit, and head protection (helmet).

P2 particle filter (filters at least 94% of atmospheric particles, color code: white).

Avoid release to the environment.

SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Odor	Odorless
Color	White
Molecular mass	56.08 g/mol
Odor threshold	No data available
pH	12.6 (20 °C)
pH solution	No data available
Relative evaporation rate (butyl acetate = 1)	No data available
Melting/Freezing point	2580 °C
Boiling point	2850 °C (1013 hPa)
Flash point	No data available
Self-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Relative vapor density at 20 °C	No data available
Relative density	3.37 (20 °C)
Bulk density	950 kg/m ³
Solubility	956 mg/l on water (20 °C)
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



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10.1 Reactivity	This material is not reactive under normal environmental conditions.
10.2 Chemical stability	Sensitive to moisture.
10.3 Possibility of hazardous reactions	Strong reactions with alcohols, acids, water. Saturated solutions of hydrated lime with water may have a pH of 12-12.49 at temperatures of 25°C or higher. The heat generated by the reaction with water may initiate fires.
10.4 Conditions to avoid	Protect from moisture.
10.5 Incompatible materials	Reacts violently with strong acids, water, chlorine trifluoride, or boron trifluoride; reacts with water, generating enough heat to ignite combustible materials.
10.6 Hazardous decomposition products	None under recommended storage and handling conditions.

SECTION 11.- TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Likely routes of exposure	Skin and eye contact, inhalation, and ingestion.
Acute toxicity	Abdominal cramps, abdominal pain, burning sensation in the mouth, throat, and esophagus, diarrhea, vomiting, and collapse.
Skin corrosión/irritation	It can cause anything from irritations to severe burns, depending on the degree of exposure and the concentration of the product, especially if the skin is moist.
Serious eye damage/irritation	It can cause burns and potential damage, with symptoms such as burning, tearing, swelling, and redness.
Respiratory or skin sensitization	It can cause lung irritation leading to coughing and respiratory discomfort. Chronic exposures can cause pulmonary edema.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target toxicity (single exposure)	No data available
Specific target toxicity (repeat exposure)	No data available
Aspiration hazard	No data available

Name	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀ inhalation
Calcium oxide	> 2000 mg/kg (rat)	No data available	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	Highly toxic to aquatic organisms. LC ₅₀ (96 h) = 158 mg/l, aquatic invertebrates (ECHA) ErC ₅₀ (72 h) = 184.6 mg/l, algae (ECHA) LC ₅₀ (14 d) = 53.1 mg/l, aquatic invertebrates (ECHA) EC ₅₀ (3 h) = 300.4 mg/l, microorganisms (ECHA) NOEC (14 d) = 32 mg/l, aquatic invertebrates (ECHA)



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12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

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

Dispose of the product and its container as hazardous waste. Dispose of content/container in accordance with local, regional, national, or international regulations. Do not dispose of waste down the drain. Avoid release to the environment. Obtain specific instructions from the safety data sheet.

Waste disposal recommendations

It is hazardous waste; only approved containers may be used.

SECTION 14.- TRANSPORT INFORMATION

14.1 UN Number

1910

14.2 UN proper shipping name

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14.3 Class of hazards in transportation

8

14.4 Packaging group

III

14.3 Additional information



Other information

Special precautions for the user: 106

Overland transport

No additional information is available.

Transport by sea

No additional information is available.

Air transport

This substance is only subject to provisions for the Transport of Dangerous Goods when transported by air.

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



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Clean Water Act. No data available

CERCLA. No data available

National Regulations. Norma Oficial Mexicana NOM-002-SCT/2011, Listado de las sustancias y materiales peligrosos más usualmente transportados.

SECTION 16.- OTHER INFORMATION

NFPA	NFPA health Hazard	3	NFPA fire Hazard	0	NFPA instability Hazard	1	NFPA Special hazard	W
HMIS III	Health	3	Flammability	0	Physical	1	Personal protection	E

Safety goggles, gloves, apron, and dust respirator.

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

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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