

## Material Safety Data Sheet



# Calcium Oxide

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**Carolina Biological Supply Company**

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**CAROLINA**  
www.carolina.com

### Section 1 - Product Description

**Product Name:** Calcium Oxide

**Product Code(s):** 85-2240, 85-2270

**Size:** 500 g

**Chemical Name:** Calcium Oxide

**CAS Number:** 1305-78-8

**Formula:** CaO

**Synonyms:** Lime, Quick lime, Burnt Lime

**Distributor:** Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 - Hazard Identification

**Emergency Overview:** Causes burns. Harmful by inhalation, in contact with skin and if swallowed. Avoid contact with eyes.

**Potential Health Effects:**

**Eyes:** Causes severe burns and eye damage upon direct contact. Vapor is irritating.

**Skin:** May cause severe irritation or chemical burns.

**Ingestion:** May cause gastrointestinal discomfort.

**Inhalation:** May cause irritation to respiratory tract.

### Section 3 - Composition / Information on Ingredients

**Principal Hazardous Components:** Calcium Oxide (1302-78-8) 90-95%

**TLV units:** ACGIH-TLV 2 mg/m<sup>3</sup> (TWA)

**PEL units:** OSHA-PEL 5 mg/m<sup>3</sup> (TWA)

### Section 4 - First Aid Measures

**Emergency and First Aid Procedures:**

**Eyes** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin** - After contact with skin, wash immediately with plenty of water.

**Ingestion** - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. If swallowed, rinse mouth with water (only if the person is conscious).

**Inhalation** - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

### Section 5 - Firefighting Procedures

**Flash Point (Method Used):** N/A

**NFPA Rating:**

**Health:** 3

**Fire:** 0

**Reactivity:** 1

**Extinguisher Media:** Use dry chemical, CO2 or appropriate foam.

**Flammable Limits in Air % by Volume:** N/A

**Autoignition Temperature:** N/A

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Readily absorbs moisture from air.

Non-combustible but contact with water or moisture may generate sufficient heat to ignite combustible materials  
Keep container dry.

## Section 6 - Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

## Section 7 - Special Precautions

**Precautions to Take in Handling or Storing:** Readily absorbs moisture from air.

Keep away from oxidizing materials and strong acids.

Keep container dry.

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Avoid contact with skin and eyes.

Do not breathe dust.

Use only in well-ventilated areas. Keep container tightly closed in a cool, well-ventilated place.

## Section 8 - Protection Information

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

**Ventilation:**

**Local Exhaust:** Yes

**Mechanical(General):** Yes

**Special:** No

**Other:** No

**Protective Gloves:** Natural rubber, Neoprene, PVC or equivalent.

**Eye Protection:** Splash proof chemical safety goggles should be worn.

**Other Protective Clothing or Equipment:** Lab coat, apron, eye wash, safety shower.

## Section 9 - Physical Data

**Molecular Weight:** 56.08

**Boiling Point:** 2850 °C

**Vapor Density(Air=1):** N/A

**Percent Volatile by Volume:** N/A

**Solubility in Water:** Slightly Soluble

**Melting Point:** 2570 °C

**Vapor Pressure:** N/A

**Specific Gravity (H2O=1):** 3.2-3.4

**Evaporation Rate (BuAc=1):** N/A

**Appearance and Odor:** White-gray solid with earthy odor.

## Section 10 - Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** Moisture; Product is hygroscopic.

Acids,

**Incompatibility (Materials to Avoid):** Oxidizers, Halogens, Organics, Water,

**Hazardous Decomposition Products:** H2S - Hydrogen Sulfide gas, COx,

**Hazardous Polymerization:** Will not occur

## Section 11 - Toxicity Data

**Toxicity Data:** orl-rat LD50 500 mg/kg

**Effects of Overexposure:**

**Acute:** See Section 2

**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

**Conditions Aggravated by Overexposure:**

**Target Organs:** N/A

**Primary Route(s) of Entry:** N/A

## Section 12 - Ecological Data

**EPA Waste Numbers:** N/A

## Section 13 - Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

## Section 14 - Transport Information

**DOT Proper Shipping Name:** UN1910, Calcium Oxide, 8, III

## Section 15 - Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Acute

**Name List:**

No

**Chemical Category:**

No

**CERCLA Section 103 RQ(lb.):** No

**RCRA Section 261.33:** No

## Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act

SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act