

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 203.00

Revision Date: March 7, 2001

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### Section 1 — Chemical Product and Company Identification

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#### Calcium Oxide

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

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### Section 2 — Composition, Information on Ingredients

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Calcium Oxide

Synonyms: lime, quicklime

CAS#: 1305-78-8

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### Section 3 — Hazards Identification

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White to gray powder, lumps, pebbles or granules. Odorless.

A powerful corrosive to living tissue and an irritant. Avoid body tissue contact. Avoid inhaling dust.

Lime reacts with water releasing heat and forming alkaline solution.

#### FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-2

Exposure-2

Storage-1

0 is low hazard, 3 is high hazard

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### Section 4 — First Aid Measures

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Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give no more than 1-2 cups of water for dilution. Do not induce vomiting. Call a physician or poison control at once.

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### Section 5 — Fire Fighting Measures

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Non flammable solid.

Lime reacts with water releasing heat and forming alkaline solution. If combustible materials are present, fire may result.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

H-3

F-0

R-1

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### Section 6 — Accidental Release Measures

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Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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### Section 7 — Handling and Storage

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Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates.

Store in a cool dry place. Moisture sensitive material, store in a Flinn Chem-Saf bag. Use and dispense in a hood.

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### Section 8 — Exposure Controls, Personal Protection

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Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 0.5 mg/m<sup>3</sup> (OSHA)

### Section 9 — Physical and Chemical Properties

White to gray powder, lumps, pebbles or granules. Odorless.  
Solubility: Solubility in water: reacts to form calcium hydroxide.  
Formula: CaO  
Formula Weight: 56.08

Specific Gravity: 3.4  
Melting Point: 2580 C  
Boiling Point: 2850 C

### Section 10 — Stability and Reactivity

Dangerous in contact with organic materials. Avoid contact with water, acids and humid air. Avoid storing this substance in glass bottles unless very tightly sealed. Substance takes on water easily, generates heat and bottles break spilling contents.  
Shelf life: Fair to poor; protect from moisture

### Section 11 — Toxicological Information

Acute effects: Corrosive  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD50: N.A.  
IHL-RAT LC50: N.A.  
SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

### Section 12 — Ecological Information

Data not yet available.

### Section 13 — Disposal Considerations

Please consult with state and local regulations.  
Flinn Suggested Disposal Method #10 is one option.

### Section 14 — Transport Information

Shipping Name: Calcium Oxide  
Hazard Class: 8, Corrosive  
UN Number: UN1910

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (215-138-9).

### Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

**FLINN SCIENTIFIC INC.**

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*Flinn Chemical Packaging Prevents Accidents*

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