

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 203.00

Revision Date: June 14, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Calcium Oxide

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

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Calcium oxide

Synonyms: lime, quicklime

CAS#: 1305-78-8

SECTION 3 — HAZARDS IDENTIFICATION

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 an alkaline solution.

FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-2

Exposure-2

Storage-1

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and 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 at least 15 minutes.

External: Wash continuously with fresh water for at least 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.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

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

Fire Fighting Instructions: Use a 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

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Sweep up the spill, place in a 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.

SECTION 7 — HANDLING AND STORAGE

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.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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/m³ (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 when 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, which generates heat and causes bottles to 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

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**