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SDS #: 203
Revision Date: June 24, 2015

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Calcium Oxide Safety Data Sheet (SDS)



SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Calcium Oxide

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9572

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION	
Hazard class: Skin corrosion or irritation (Category 2). Causes skin irritation (H315).	
Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).	
Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).	

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium oxide	1305-78-8	CaO	56.08	
Synonyms: Lime; Quicklime				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).
If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).
If on skin: Wash with plenty of water (P302+P352). If skin irritation occurs: Get medical advice or attention (P332+P313).
If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.
Lime reacts with water releasing heat and forming an alkaline solution. If combustible

NFPA Code
H-3

materials are present, fire may result.
In case of fire: Use a tri-class dry chemical fire extinguisher.

F-0
R-1

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).
Exposure guidelines: PEL 5 mg/m³ (OSHA) TLV 2 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White to gray powder, lumps, pebbles, or granules. Odorless.
Soluble: Water, reacts to form calcium hydroxide. Acids.

Boiling point: 2850 °C
Melting point: 2572 °C
Specific gravity: 3.34

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, keep dry. See Section 7 for further information.

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.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #10 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Calcium Oxide. Hazard class: 8, Corrosive. UN number: UN1910.

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

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

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