

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 201.00

Revision Date: November 25, 2002

Section 1 — Chemical Product and Company Identification

Calcium Nitrate

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 Nitrate

Synonym: lime nitrate

CAS#: 13477-34-4

Section 3 — Hazards Identification

Moist, white odorless crystals.

Body tissue irritant, slightly toxic. Harmful if inhaled. Avoid breathing dust. Avoid contact with skin and eyes.

Strong oxidizer; potential fire risk in contact with organic material; may explode if shocked or heated.

When heated, emits toxic NOx fumes, becomes explosive.

FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-3

Exposure-1

Storage-1

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

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 large quantities of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Non-flammable solid.

When heated, emits toxic NOx fumes. Explosion and fire hazard on contact with organic materials. May explode if shocked or heated.

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

None Established

Section 6 — Accidental Release Measures

Gather up material in a pile (do not sweep). Place in a suitable container. Use the disposal method listed on the right.

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.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates and nitrites.

Store in a cool dry place. Deliquescent, store in 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 exhaust ventilation to keep airborne concentrations low.

Section 9 — Physical and Chemical Properties

Moist, white, odorless crystals.

Solubility: Soluble in water, acetone and alcohol. Deliquescent.

Formula: $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$

Formula Weight: 236.16

Specific Gravity: 1.82

Melting Point: 45 C

Section 10 — Stability and Reactivity

Avoid contact with strong reducing agents, acids, and organic material.

Shelf life: Fair to poor, deliquescent; store in a Flinn Chem-Saf bag.

Section 11 — Toxicological Information

Acute effects: Irritant

Chronic effects: N.A.

Target organs: Blood, central nervous system

ORL-RAT LD50: 3900 mg/kg

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 #26a is one option.

Section 14 — Transport Information

Shipping Name: Calcium Nitrate

Hazard Class: 5.1

UN Number: UN1454

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (233-332-1), RCRA code D001.

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.

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Flinn Chemical Packaging Prevents Accidents

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