

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 201.00

Revision Date: June 14, 2010

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 and potential fire and explosion risk when in contact with organic material. May explode if shocked or heated. When heated, emits toxic NO_x fumes and 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 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 large quantities of water. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

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

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

None

established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Gather material in a pile (do not sweep). Place in a suitable 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.

Specific Gravity: 1.82

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

Melting Point: 45 °C

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

Formula Weight: 236.16

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.

ORL-RAT LD_{50} : 3900 mg/kg

Chronic effects: N.A.

IHL-RAT LC_{50} : N.A.

Target organs: Blood and central nervous system.

SKN-RBT LD_{50} : 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

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