

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 839.10

Revision Date: July 13, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Uranyl 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

Uranyl Nitrate

Synonym: uranium oxynitrate

CAS#: 10102-06-4

SECTION 3 — HAZARDS IDENTIFICATION

Yellow rhombic crystals. Odorless.

This material is only slightly radioactive (less than 1.1 microcuries per gram), while this material is not regulated because of the package size, handle with care.

Toxic by ingestion and inhalation. Corrosive to body tissues. Avoid all body tissue contact.

Strong oxidizer.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-3

Exposure-3

Storage-0

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 or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, emits toxic fumes of NO_x and uranium.

Strong oxidizer. Fire and explosion risk when in contact with combustible materials.

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

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.

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 50 mg/m³ (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Yellow rhombic crystals. Odorless.

Solubility: Water and alcohol.

Formula: $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$

Formula weight: 502.13

Boiling point: 118 °C

Melting point: 60.2 °C

Specific gravity: 2.807

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong reducing agents and combustible materials.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Poison, corrosive

Chronic effects: N.A.

Target organs: Kidney, skin

ORL-RAT LD_{50} : >500 mg/kgIHL-RAT LC_{50} : N.A.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 review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Uranyl Nitrate, solid

Hazard class: 7, Radioactive, Oxidizer

UN number: UN2981

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed.

SECTION 16 — OTHER INFORMATION

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