

Safety Data Sheet (SDS)

3/10/2025: Reviewed file, more current MSDS/SDS not available. CAS

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Uranyl Nitrate

Signal Word
DANGER

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

Chemtrec Emergency Phone Number: (800) 424-10467

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Acute toxicity, oral and inhalation (Category 2). Fatal if swallowed or inhaled (H300+H330). Do not eat, drink or smoke when using this product (P270). Avoid breathing dust or fumes (P261).



Hazard class: Specific target organ toxicity, repeated exposure (Category 2). May cause damage to lungs, kidney, brain through prolonged or repeated exposure (H373). Do not eat, drink or smoke when using this product (P270).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Uranyl nitrate hexahydrate	10102-06-4	UO ₂ (NO ₃) ₂ •6H ₂ O	502.13	
Synonyms: Uranium oxynitrate				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P310).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

NFPA Code

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

None established

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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, nitrites and azides. Do not breathe dust or fumes (P260). Use only in a hood or well-ventilated area (P271). Keep container tightly closed (P233). Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, eye protection, and face protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). Wear respiratory protection (P284).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Yellow rhombic crystals. Odorless.	Boiling point: 118 °C
Soluble: Water and alcohol	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.	ORL-RAT LD ₅₀ : greater than 500 mg/kg
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: Kidney, skin.	SKN-RBT LD ₅₀ : 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 #26c is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Uranyl Nitrate, solid; Hazard class: 7, Radioactive, Oxidizer; UN number: UN2981

SECTION 15 — REGULATORY INFORMATION

TSCA-listed.

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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