

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 239.00

Revision Date: November 25, 2002

Section 1 — Chemical Product and Company Identification

Chromium 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

Chromium Nitrate Hydrate

Synonym: chromium (III) nitrate, chromic nitrate

CAS#: 7789-02-8

Section 3 — Hazards Identification

Metallic grey/black monoclinic crystals; odorless.

Slightly toxic by ingestion, irritant to body tissues. Avoid inhalation of dust.

Oxidizer; avoid contact with organic materials.

FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-2

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.

Strong oxidizing agent, avoid contact with organic materials and reducing agents. When heated to decomposition, emits toxic fumes of NO_x.

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. Remove all ignition sources and water. 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.

Deliquescent, store in Flinn Chem-Saf Bag. Keep container tightly closed. Store in a cool dry place. 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 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 0.5 mg/m³ (OSHA)

Section 9 — Physical and Chemical Properties

Metallic grey/black monoclinic crystals; odorless.
Solubility: Water soluble.
Formula: $\text{Cr}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$
Formula Weight: 400.18

Specific Gravity: 1.85
Boiling Point: 212 F
Melting Point: 140 F

Section 10 — Stability and Reactivity

Avoid contact with heat, organic materials, reducing agents, and aluminum or magnesium metals.
Shelf life: Poor; substance very deliquescent.

Section 11 — Toxicological Information

Acute effects: Harmful dust, irritant
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: 3250 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 #27f is one option.

Section 14 — Transport Information

Shipping Name: Chromium Nitrate
Hazard Class: 5.1 Oxidizer
UN Number: UN2720

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (236-921-1), RCRA code D001, D007.

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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