

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 239.00

Revision Date: October 6, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chromium Nitrate Hydrate

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 gray/black monoclinic crystals. Odorless.

Slightly toxic by ingestion and an 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 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.

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 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. Remove all ignition sources and water. Sweep up the spill, place in a 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 a 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: PEL 0.5 mg/m³ (as Cr) (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Metallic gray/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

Boiling point: 100 °C

Melting point: 60 °C

Specific gravity: 1.85

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with heat, organic materials, reducing agents, and aluminum or magnesium metals.

Shelf life: Poor, 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 review all federal, state and local regulations that may apply, before proceeding.

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

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