

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 239.00

Revision Date: June 21, 2010

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 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: 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.

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: 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 LD_{50} : 3250 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 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

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