

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 243.00

Revision Date: December 7, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Chromium Trioxide

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 trioxide

Synonyms: Chromium (VI) oxide, Chromic acid, Chromic anhydride

CAS#: 1333-82-0

### SECTION 3 — HAZARDS IDENTIFICATION

Dark purple-red flakes, crystals, or powder. Odorless.

Known human carcinogen (IARC-1).

Corrosive to all body tissue and highly toxic. Avoid all body tissue contact.

Powerful oxidizing agent. Avoid contact with reducing agents and organic materials.

#### FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-3

Exposure-3

Storage-2

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: Do NOT induce vomiting. Rinse mouth. Give 2 - 4 cups of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Strong oxidizing agent. Explosion and fire hazard on contact with organic material. When heated to decomposition, emits toxic fumes.

**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. 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 #4. Store with hydroxides, oxides, silicates, and carbonates.

Store in a cool, dry place. Deliquescent; store in Flinn Chem-Saf Bag and then inside a Flinn Saf-Stor Can.

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 0.001 mg/m<sup>3</sup> (NIOSH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Dark purple-red flakes, crystals, or powder. Odorless.

Solubility: Water soluble.

Formula: CrO<sub>3</sub>

Formula weight: 100.1

Decomposes at 250 °C

Melting point: 197 °C

Specific gravity: 2.7

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**SECTION 10 — STABILITY AND REACTIVITY**

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Strong oxidizing agent, avoid contact with organic materials, heat, and phosphorus. Decomposes at 250 °C.

Shelf life: Poor, deliquescent.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Highly toxic and corrosive.

Chronic effects: Carcinogen and mutagen.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 80 mg/kg

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #12a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Chromic acid, solid

Hazard class: 5.1, Oxidizer, corrosive

UN number: NA1463

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (215-607-8), RCRA code D001, D007.

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**SECTION 16 — OTHER INFORMATION**

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