

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 56.00

Revision Date: December 8, 2011

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Ammonium Dichromate

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Ammonium dichromate

Synonym: Ammonium bichromate

CAS#: 7789-09-5

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### SECTION 3 — HAZARDS IDENTIFICATION

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Orange crystals. Odorless.

Known human carcinogen (IARC-1).

Strong oxidizing agent and dangerous fire risk if mixed with organic material. Ingestion can be fatal.

Inhalation causes severe irritation. Avoid inhaling dust. Irritating to body tissues. Avoid all body tissue contact.

#### FLINN AT-A-GLANCE

Health-3

Flammability-1

Reactivity-3

Exposure-3

Storage-0

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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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 out mouth, give 1 to 2 cups of water or milk, induce vomiting. Call a physician or poison control at once.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Strong oxidizer under fire conditions. Dangerous fire risk.

Thermal decomposition of ammonium dichromate is initiated by local heating to 190 °C. Flame and sparks spread rapidly through the mass, and if confined, it may become explosive.

**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

H-2

F-1

R-1

OX

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Restrict unprotected personnel from the area and ventilate 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.

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### SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Inorganic #8. Store with borates, chromates, manganates, and permanganates. Use and dispense in a hood.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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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 0.05 mg/m<sup>3</sup> (as Cr) (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Orange crystals.  
Solubility: Water soluble (30%).  
Formula:  $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$   
Formula weight: 252.06

Melting point: 170 °C (decomposes)  
Specific gravity: 2.15

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**SECTION 10 — STABILITY AND REACTIVITY**

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Strong oxidizer. Avoid contact with organic or easily oxidized substances. Avoid sources of heat. Avoid reducing agents, organic substances, and oxidizing agents.  
Shelf life: Fair to poor.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Poison, irritant, sensitizer, stomach pains, vomiting, and diarrhea.      ORL-RAT LD<sub>50</sub>: N.A.  
Chronic effects: Carcinogen; possible mutagen.              IHL-RAT LC<sub>50</sub>: N.A.  
Target organs: Lungs, kidneys.                                      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: Ammonium Dichromate  
Hazard class: 5.1, Oxidizer  
UN number: UN1439  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (232-143-1), 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.**