

## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Ammonium Dichromate

Signal Word  
**DANGER**

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

Chemtrec Emergency Phone Number: (800) 424-9399

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing liquids; Oxidizing solids (Category 3). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 3). Toxic if swallowed (H301). Do not eat, drink or smoke when using this product (P270).

Hazard class: Acute toxicity, dermal (Category 4). Harmful in contact with skin (H312).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe dust or fumes (P260).

Hazard class: Sensitization, skin and respiratory tract (Category 1). May cause an allergic skin reaction, allergy or asthma symptoms or breathing difficulties if inhaled (H317+H334).

Hazard class: Acute toxicity, inhalation (Category 1). Fatal if inhaled (H330).

Hazard class: Germ cell mutagenicity (Category 1). May cause genetic defects (H340). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202).

Use personal protective equipment as required (P281).

Hazard class: Carcinogenicity (Category 1). May cause cancer (H350).



### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ammonium dichromate	2151163	(NH <sub>4</sub> ) <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	252.06	
Synonyms: Ammonium bichromate				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

**If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth. Immediately call a POISON CENTER or physician (P301+P310+P330). Do NOT induce vomiting.

### SECTION 5 — FIRE FIGHTING MEASURES

Strong oxidizer under fire conditions. Dangerous fire risk.

Thermal decomposition of ammonium dichromate is initiated by local heating to 190 °C. Flame

NFPA Code

H-2

and sparks spread rapidly through the mass, and if confined, it may become explosive.

F-1

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

R-1

OX

---

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

---

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.

---

## SECTION 7 — HANDLING AND STORAGE

---

Flinn Suggested Chemical Storage Pattern: Inorganic #8. Store with borates, chromates, manganates, and permanganates. Keep and store away from clothing and combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Keep container tightly closed (P233). Use only in a hood or in a well ventilated area.

---

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

---

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling. Use only in a hood or in a well ventilated area.

Exposure guidelines: (as Chromium VI) PEL 0.005 mg/m<sup>3</sup> (OSHA)/TLV 0.05 mg/m<sup>3</sup> (ACGIH).

---

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

---

Orange crystals. Odorless.

Melting point: 170 °C (decomposes)

Soluble: Water and alcohol

Specific gravity: 2.15

---

## SECTION 10 — STABILITY AND REACTIVITY

---

Strong oxidizer. Avoid sources of heat. Avoid reducing agents, organic substances, and oxidizing agents.

Decomposition becomes self-sustaining at ~225 °C. Decomposition reaction releases heat and causes the solid to swell.

Shelf life: Fair to poor. Decomposes with slight heating. See Section 7 for further information.

---

## SECTION 11 — TOXICOLOGICAL INFORMATION

---

Acute effects: Poison, irritant, sensitizer, stomach pains, vomiting, and diarrhea.

ORL-RAT LD<sub>50</sub>: 53 mg/kg

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

Chronic effects: Carcinogen; possible mutagen.

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

Target organs: Lungs, kidneys.

---

## 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 #12a is one option.

---

## SECTION 14 — TRANSPORT INFORMATION

---

Shipping name: Ammonium Dichromate. Hazard class: 5.1, Oxidizer. UN number: UN1439.

---

## SECTION 15 — REGULATORY INFORMATION

---

TSCA-listed, EINECS-listed (232-143-1), RCRA code D001, D007.

---

## SECTION 16 — OTHER INFORMATION

---

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use

and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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

N/A = Not applicable

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

**Revision Date:** March 21, 2014

---