

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 56.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ammonium Dichromate

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

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	7789-09-5	$(\text{NH}_4)_2\text{Cr}_2\text{O}_7$	252.06	
Synonym: 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 and sparks spread rapidly through the mass, and if confined, it may become explosive.

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

NFPA Code

H-2

F-1

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/m³ (OSHA) TLV 0.05 mg/m³ (ACGIH).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Orange crystals. Odorless.
Soluble: Water and alcohol

Melting point: 170 °C (decomposes)
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 LD₅₀: 53 mg/kg

IHL-RAT LC₅₀: N.A.

Chronic effects: Carcinogen; possible mutagen.

SKN-RBT LD₅₀: N.A.

Target organs: Lungs, kidneys.

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 #12a is one option.

SECTION 14 — TRANSPORT INFORMATION

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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

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

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