

SDS #: 60

Revision Date: March 21, 2014

10/28/2024: File reviewed, more current MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Signal Word WARNING

Ammonium Molybdate

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

Chemtrec Emergency Phone Number: (800) 424-9408

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).



Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ammonium molybdate tetrahydrate	12054- 85-2	(NH ₄) ₆ Mo ₇ O ₂ 4 •4H ₂ O	1235.86	
Synonyms: Ammonium molybdate(VI) tetrahydrate; Ammonium molybdate				

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 (P304+P340).

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 eye irritation persists eyes:** Get medical advice or attention (P337+P313).

If on skin: Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

NFPA Code

When heated to decomposition, may emit toxic fumes.

None established

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and water. Ventilate area. Wipe up the spill, place in a sealed bag or container, and dispose. 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. Store at room temperature.

Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: PEL, TLV: 0.5 mg/m³ (as Mo) (ACGIH, OSHA).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White powder. Odorless. Melting point: 190 °C (decomposes)

Soluble: Water Specific gravity: 2.27

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers and bases.

When heated to decomposition, emits toxic fumes of NO_x and NH₃.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic. Irritant.

ORL-RAT LD₅₀: 333 mg/kg
Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

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 #6 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed; EINECS-listed (234-722-4).

SECTION 16 — OTHER INFORMATION

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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.

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