

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 60.00

Revision Date: May 11, 2010

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Ammonium Molybdate

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

Ammonium molybdate

Synonym: ammonium molybdate (VI) tetrahydrate

CAS#: 12027-67-7

### SECTION 3 — HAZARDS IDENTIFICATION

White, odorless powder.

Moderately toxic by ingestion. Irritating to skin and eyes. Avoid body tissue contact.

Avoid breathing dust. Exposure can cause vomiting and confusion of muscular coordination.

#### FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-1

Exposure-2

Storage-0

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: Immediately flush with fresh water for at least 15 minutes.

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Give large quantities of water. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, emits toxic fumes of NH<sub>3</sub> and NO<sub>x</sub>.

**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. Remove all ignition sources and water. 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.

Use and dispense in a hood.

Store at room temperature.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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: PEL, TLV: 5 mg (Mo)/m<sup>3</sup> (ACGIH, OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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White, odorless powder.  
Solubility: Water soluble.  
Formula:  $(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$   
Formula Weight: 1235.86

Specific Gravity: 2.27

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizers and bases.  
When heated to decomposition, emits toxic fumes of  $\text{NO}_x$  and  $\text{NH}_3$ .  
Shelf life: Indefinite.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Highly toxic. Irritant.  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT  $\text{LD}_{50}$ : 333 mg/kg  
IHL-RAT  $\text{LC}_{50}$ : N.A.  
SKN-RBT  $\text{LD}_{50}$ : 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 consult with state and local regulations.  
Flinn Suggested Disposal Method #6 is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping Name: Not regulated  
Hazard Class: N/A  
UN Number: N.A.  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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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.**