

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 599.00

Revision Date: September 27, 2010

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Phosphomolybdic Acid

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

Phosphomolybdic Acid

Synonym: molybdophosphoric acid

CAS#: 51429-74-4

### SECTION 3 — HAZARDS IDENTIFICATION

Yellowish crystals. Plastic-like odor.

Slightly toxic by ingestion and inhalation. Corrosive to body tissues. Avoid body tissue contact.

#### FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-2

Exposure-2

Storage-0

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician, 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 15 minutes.

External: Wash continuously with fresh water and mild soap for 15 minutes.

Internal: Rinse out mouth, give large quantities of water. Call a physician or poison control at once. Never give anything by mouth to an unconscious person.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, emits toxic fumes of POx.

**Fire Fighting Instructions:** Use 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 area. Sweep up, place in 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 #9. Store with acids.

Use and dispense in a hood and refrigerate.

### 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: TWA 5 mg/m<sup>3</sup> (as Mo) (OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Yellowish crystals. Plastic-like odor.  
Solubility: Soluble in water and alcohol.  
Formula and formula weight are approximates.  
Formula:  $P_2O_5 \cdot 24MoO_3 \cdot xH_2O$   
Formula Weight:  $3596.48 + xH_2O$

Melting Point: 78-90 °C  
Specific Gravity: 3.15

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with combustible materials.  
Shelf life: Indefinite.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Corrosive  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD50: N.A.  
IHL-RAT LC50: N.A.  
SKN-RBT LD50: 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, RCRA code D001.

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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.**