

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 530.10

Revision Date: September 28, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Molybdenum Oxide

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

Molybdenum oxide

Synonyms: molybdenum dioxide, molybdenum (IV) oxide

CAS#: 18868-43-4

SECTION 3 — HAZARDS IDENTIFICATION

Lead-gray powder. Odorless.

Irritating to skin and mucous membranes. Avoid body tissue contact.

FLINN AT-A-GLANCE

Health-0

Flammability-0

Reactivity-0

Exposure-1

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

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the 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 #4. Store with hydroxides, oxides, silicates, and carbonates.

Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a 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 5 mg/m³ (as soluble Mo) (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Lead-gray powder. Odorless.

Solubility: Generally insoluble; slightly soluble in sulfuric acid.

Formula: MoO₂

Formula weight: 127.94

Melting point: ~1800 °C

Specific gravity: 6.47

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Good, if stored properly

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant

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.

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 #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated

Hazard class: N/A

UN number: N/A

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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