

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Molybdenum(IV) Oxide Signal Word
WARNING

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

Chemtrec Emergency Phone Number: (800) 424-10023

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, dermal (Category 5). May be harmful in contact with skin (H313).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Molybdenum oxide	18868-43-4	MoO ₂	127.94	
Synonyms: Molybdenum dioxide; Molybdenum(IV) oxide				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

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.

If on skin: Wash with plenty of water.

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

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

NFPA Code

None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

Exposure guidelines: PEL 15 mg/m³ (total dust) (OSHA), TLV 10 mg/m³ (inhalable fraction) (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Lead-gray powder. Odorless.

Melting point: ~1800 °C

Soluble: Generally insoluble. Slightly in sulfuric acid.

Specific gravity: 6.47

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: 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 #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

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

SECTION 15 — REGULATORY INFORMATION

Not listed.

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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