



HOLYBDIC ACID 85%

Material Safety Data Sheet

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Emergency Telephone Number  
314-982-5000

Effective Date: 10-31-85

PRODUCT IDENTIFICATION:

Synonyms: None.

Formula CAS No.: 7782-91-4

Molecular Weight: 161.95

Hazardous Ingredients:  
Not applicable.

Chemical Formula:  $H_2MoO_4$

PRECAUTIONARY MEASURES

WARNING! MAY BE HARMFUL IF SWALLOWED OR INHALED.  
CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

Avoid contact with eyes, skin and clothing.  
Wash thoroughly after handling.  
Avoid breathing dust.  
Keep container closed.  
Use with adequate ventilation.

EMERGENCY/FIRST-AID

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. In all cases call a physician.

SEE SECTION 5.

DOT Hazard Class: Not Regulated

Physical Data

Appearance: Fine, white to pale yellow powder.  
Odor: Odorless.

Solubility: Slightly soluble in water.

Boiling Point: Not applicable.

Vapor Density (Air=1): No information found.

Melting Point: 115°C (239°F) decomposes.

Vapor Pressure (mm Hg): No information found.

Density: No information found.

Evaporation Rate: No information found.

SECTION 2

Fire and Explosion Information

Fire: Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Reactivity Data

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

When heated to decomposition may emit toxic metal fumes.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Interhalogens, metals.

Leak/Spill/Disposal Information

Ventilate area of leak or spill. Clean-up personnel require protective clothing and respiratory protection from dust.

Spills: Pick up and place in a suitable container for reclamation or disposal in a method that does not generate dust.

Disposal: Whatever cannot be saved for reclamation may be disposed in a RCRA approved hazardous waste facility.

Ensure compliance with local, state and federal regulations.

Molybdic Acid

Molybdenum trioxide

Health Hazard Information  
A. Exposure/Health Effects

SECTION 5

Inhalation: Inhalation of dust irritates respiratory tract. May cause pulmonary disorders. Can be a route of absorption by the body.

Ingestion: Based on animal tests with molybdenum trioxide, may be toxic. May cause severe distress, cramping, vomiting and hypertension.

Skin Contact: Irritant to the skin.

Eye Contact: Moderate eye irritant. Contact may cause eye damage.

Chronic Exposure: Prolonged exposure may produce anemia.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

B. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call physician immediately.

Skin Exposure: Remove any contaminated clothing. Wipe off excess from skin. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists

Eye Exposure: Wash eyes with plenty of water for at least 15 minutes. Call a physician.

C. TOXICITY DATA (RTECS, 1982)

Molybdenum trioxide [1313-27-5]:  
Oral rat LD50: 125 mg/kg.

Occupational Control Measures

SECTION 6

Airborne Exposure Limits: Molybdenum [7439-98-7]: soluble compounds  
-OSHA Permissible Exposure Limit (PEL):  
5 mg (No)/m<sup>3</sup> (TWA).  
-ACGIH Threshold Limit Value (TLV):  
5 mg (No)/m<sup>3</sup> (TWA).  
10 mg (No)/m<sup>3</sup> (STEL).

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation. A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved)

If the TLV is exceeded, a dust/mist respirator with chemical goggles may be worn, in general, up to ten times the TLV. Consult respirator supplier for limitations. Alternatively, a supplied air full facepiece respirator or airline hood may be worn.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information

SECTION 7

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities.

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