

# Material Safety Data Sheet

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Molybdenum Standard Solution Ampule, 75 mg/l as Mo  
**Catalog Number:** 2557502

Hach Company  
P.O.Box 389  
Loveland, CO USA 80539  
(970) 669-3050

**Emergency Telephone Numbers:**  
(Medical and Transportation)  
(303) 623-5716 24 Hour Service  
(515)232-2533 8am - 4pm CST

**MSDS Number:** M01018  
**Chemical Name:** Not applicable  
**CAS No.:** Not applicable  
**Chemical Formula:** Not applicable  
**Chemical Family:** Not applicable  
**Hazard:** May cause irritation.  
**Date of MSDS Preparation:**  
**Day:** 4  
**Month:** 05  
**Year:** 2002

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### Demineralized Water

**CAS No.:** 7732-18-5  
**TSCA CAS Number:** 7732-18-5  
**Percent Range:** 90.0 - 100.0  
**Percent Range Units:** volume / volume  
**LD50:** None reported  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** No effects anticipated.

### Other components, each

**CAS No.:** Not applicable  
**TSCA CAS Number:** Not applicable  
**Percent Range:** < 1.0  
**Percent Range Units:** weight / volume  
**LD50:** Not applicable  
**LC50:** Not applicable  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** Any ingredient(s) of this product listed as "Other component(s)" is not considered a health hazard to the user of this product.

### Sodium Phosphate, Dibasic

**CAS No.:** 7558-79-4  
**TSCA CAS Number:** 7558-79-4  
**Percent Range:** 1.0 - 5.0  
**Percent Range Units:** volume / volume  
**LD50:** Oral rat LD50 = 17 g/kg.  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** May cause irritation.

**Potassium Chloride**

**CAS No.:** 7447-40-7  
**TSCA CAS Number:** 7447-40-7  
**Percent Range:** 1.0 - 5.0  
**Percent Range Units:** weight / volume  
**LD50:** Oral rat LD<sub>50</sub> = 2600 mg/kg  
**LC50:** None reported.  
**TLV:** Not established.  
**PEL:** Not established.  
**Hazard:** May cause irritation.

**Potassium Sulfate**

**CAS No.:** 7778-80-5  
**TSCA CAS Number:** 7778-80-5  
**Percent Range:** 1.0 - 5.0  
**Percent Range Units:** weight / volume  
**LD50:** Oral woman LDLo = 750 mg/kg, Oral rat LD50 = 6600 mg/kg  
**LC50:** None reported  
**TLV:** Not established  
**PEL:** Not established  
**Hazard:** Nuisance dust.

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**3. HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Appearance:** Clear, colorless liquid  
**Odor:** None  
**MAY CAUSE EYE AND SKIN IRRITATION**

**HMIS:**

**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0  
**Protective Equipment:** X - See protective equipment, Section 8.

**NFPA:**

**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0  
**Symbol:** Not applicable

**Potential Health Effects:**

**Eye Contact:** May cause irritation  
**Skin Contact:** May cause irritation  
**Skin Absorption:** None reported  
**Target Organs:** None reported  
**Ingestion:** Very large doses may cause: nausea vomiting diarrhea  
**Target Organs:** None reported  
**Inhalation:** No effects anticipated  
**Target Organs:** Not applicable  
**Medical Conditions Aggravated:** Pre-existing: Eye conditions Skin conditions Kidney conditions  
**Chronic Effects:** No effects anticipated  
**Cancer / Reproductive Toxicity Information:**

This product does NOT contain any OSHA listed carcinogens.

This product does NOT contain any IARC listed chemicals.

This product does NOT contain any NTP listed chemicals.

**Additional Cancer / Reproductive Toxicity Information:** None reported  
**Toxicologically Synergistic Products:** None reported

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#### 4. FIRST AID

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.  
**Skin Contact (First Aid):** Wash skin with plenty of water. Call physician if irritation develops.  
**Ingestion (First Aid):** Give large quantities of water. Call physician immediately.  
**Inhalation:** None required.

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#### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.  
**Flash Point:** Not applicable  
**Method:** Not applicable  
**Flammability Limits:**  
**Lower Explosion Limits:** Not applicable  
**Upper Explosion Limits:** Not applicable  
**Autoignition Temperature:** Not applicable  
**Hazardous Combustion Products:** This material will not burn.  
**Fire / Explosion Hazards:** This product will not burn or explode.  
**Static Discharge:** None reported.  
**Mechanical Impact:** None reported  
**Extinguishing Media:** Use media appropriate to surrounding fire conditions  
**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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#### 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**  
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.  
**Containment Technique:** Cover spilled solid material with sand or other inert material. Stop spilled material from being released to the environment.  
**Clean-up Technique:** Cover spilled material with a dry acid, such as citric or boric. Scoop up slurry into a large beaker. Dilute with a large excess of water. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.  
**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.  
**Special Instructions (for accidental release):** Mixture contains a component which is regulated as a water pollutant.  
**304 EHS RQ (40 CFR 355):** Not applicable  
**D.O.T. Emergency Response Guide Number:** None

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#### 7. HANDLING / STORAGE

**Handling:** Avoid contact with eyes skin Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.  
**Storage:** Keep container tightly closed when not in use.  
**Flammability Class:** Not applicable

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#### 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin Protection:** disposable latex gloves

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin Wash thoroughly after handling.

**TLV:** Not established

**PEL:** Not established

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** Clear, colorless liquid

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** None

**pH:** 9.0

**Vapor Pressure:** Not determined

**Vapor Density (air = 1):** Not determined

**Boiling Point:** ~100° C (~212° F)

**Melting Point:** Not determined

**Specific Gravity (water = 1):** 1.02

**Evaporation Rate (water = 1):** Not determined

**Volatile Organic Compounds Content:** Not applicable

**Partition Coefficient (n-octanol / water):** Not applicable

**Solubility:**

**Water:** Miscible

**Acid:** Miscible

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** 0.000 in/yr

**Aluminum:** 0.003 in/yr

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## 10. STABILITY / REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Conditions to Avoid:** Extreme temperatures Exposure to air.

**Reactivity / Incompatibility:** None reported

**Hazardous Decomposition:** Heating to decomposition releases: chlorides sulfur oxides

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** None reported

**LC50:** None reported

**Dermal Toxicity Data:** None reported

**Skin and Eye Irritation Data:** None reported

**Mutation Data:** None reported

**Reproductive Effects Data:** None reported

**Ingredient Toxicological Data:** Potassium Chloride: Oral rat LD50 = 2600 mg/kg, Oral human LDLo = 20 mg/kg;  
Potassium Sulfate: Oral rat LD50 = 6600 mg/kg, Oral woman LDLo = 750 mg/kg; Sodium Phosphate Dibasic: Oral rat  
LD50 = 17 g/kg

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product.

**Ingredient Ecological Information:** --