

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

MSDS No: M01018

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Molybdenum Standard Solution Ampule, 75 mg/L as Mo
Catalog Number: 2557520

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

PIN: NA

Intended Use: Standard solution

Date of MSDS Preparation:

Day: 23

Month: 09

Year: 2005

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

2. COMPOSITION / INFORMATION ON INGREDIENTS

Demineralized Water

Percent Range: 90.0 - 100.0

Percent Range Units: volume / volume

CAS No.: 7732-18-5

LD50: None reported

LC50: None reported

TLV: Not established

PEL: Not established

Ingredient WHMIS Symbol: Not applicable

Other components, each

Percent Range: < 1.0

Percent Range Units: weight / volume

CAS No.: Not applicable

LD50: Not applicable

LC50: Not applicable

TLV: Not established

PEL: Not established

Ingredient WHMIS Symbol: Not applicable

Sodium Phosphate, Dibasic

Percent Range: 1.0 - 5.0

Percent Range Units: volume / volume

CAS No.: 7558-79-4

LD50: Oral rat LD50 = 17 g/kg.

LC50: None reported

TLV: Not established
PEL: Not established
Ingredient WHMIS Symbol: Not applicable

Potassium Chloride

Percent Range: 1.0 - 5.0
Percent Range Units: weight / volume
CAS No.: 7447-40-7
LD50: Oral rat LD₅₀ = 2600 mg/kg
LC50: None reported.
TLV: Not established.
PEL: Not established.
Ingredient WHMIS Symbol: Not applicable

Potassium Sulfate

Percent Range: 1.0 - 5.0
Percent Range Units: weight / volume
CAS No.: 7778-80-5
LD50: Oral woman LDLo = 750 mg/kg, Oral rat LD50 = 6600 mg/kg
LC50: None reported
TLV: Not established
PEL: Not established
Ingredient WHMIS Symbol: Not applicable

3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Clear, colorless liquid
Physical State: Liquid
Odor: None
MAY CAUSE EYE AND SKIN IRRITATION

HMIS:

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

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 IARC listed chemicals.

This product does NOT contain any NTP listed chemicals.

Additional Cancer / Reproductive Toxicity Information: None reported
Toxicologically Synergistic Products: None reported
WHMIS Hazard Classification: Not applicable

WHMIS Symbols: Not applicable

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.

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.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. 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.

D.O.T. Emergency Response Guide Number: None

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.

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

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
Coefficient of Water / Oil: Not applicable
Solubility:
 Water: Miscible
 Acid: Miscible
 Other: Not determined
Metal Corrosivity:
 Steel: 0.000 in/yr
 Aluminum: 0.003 in/yr

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.

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

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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

12. ECOLOGICAL INFORMATION

Product Ecological Information: --
No ecological data available for this product.
Ingredient Ecological Information: --
No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

Special Instructions (Disposal): Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system.
Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

14. TRANSPORT INFORMATION

T.D.G.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA

PIN: NA

Group: NA

Subsidiary Risk: NA

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit Hazard Class: 9 UN Number 3316

15. REGULATORY INFORMATION

National Inventories:

Canadian Inventory Status: All ingredients of this product are DSL Listed.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

References: Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. In-house information. Technical Judgment.

Legend:

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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