

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Molybdate Reagent
Catalog Number: 2121916

HACH LANGE GmbH
Willstätterstrasse 11
40549 Düsseldorf, Germany
+49-(0)211-52880

Emergency Telephone Numbers:
(Poison Information Center Mainz)
(+49 (0) 6131 19240) 24 HR

SDS Number: M01211

Responsible Person:

Safety Data Sheet written::

Chemical Name: Not applicable

Chemical Formula: Not applicable

Chemical Family: Not applicable

Use of the substance/preparation: Silica determination

CAS No.: Not applicable

Hazard: Causes eye burns. May cause irritation.

Date of MSDS Preparation:

Day: 15

Month: December

Year: 2007

Additional Emergency Response Numbers: Austria: +49 (0)6131 19240, Belgium: +32-(0)70-245245, France: +33-(0)1-40370404, Italy: +39-02-66101029, Netherlands: +31-(0)30-2748888, Switzerland: +41-(0)1-2515151

Additional European Addresses:

Austria:

Belgium:

Denmark:

France:

Ireland:

Italy:

Netherlands:

Spain:

Sweden:

Switzerland:

United Kingdom:

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Clear, colorless liquid

Odor: None

EU Symbols: Not applicable

R PHRASES: Not applicable

Protective Equipment:

Potential Health Effects:

Eye Contact (EC): May cause irritation

Skin Contact (EC): May cause irritation

Skin Absorption (EC): None Reported

Target Organs (SA E): None Reported

Ingestion (EC): Very large doses may cause: irritation of the mouth and esophagus gastrointestinal tract irritation diarrhea loss of appetite gout anemia liver damage

Target Organs (Ing E): Liver

Inhalation: May cause: irritation of nose and throat difficult breathing

Target Organs (Inh E): None Reported

Medical Conditions Aggravated: Pre-existing: Eye conditions Liver conditions

Chronic Effects: Molybdenum poisoning signs include loss of appetite, listlessness and reduced growth rate. Excessive exposure to molybdenum compounds may cause gout and anemia. Chronic overexposure may cause copper deficiency enzyme activity effects liver damage

Cancer / Reproductive Toxicity Information:

This product does NOT contain any IARC listed chemicals.

Additional Cancer / Reproductive Toxicity Information: None reported

Toxicologically Synergistic Products: None reported

3. COMPOSITION / INFORMATION ON INGREDIENTS

Sodium Molybdate

EEC Number: 2315517

CAS No.: 10102-40-6

Percent Range: 1,0 - 10,0

Percent Range Units: weight / volume

Ingredient EEC Symbol: Not applicable

Ingredient R phrase(s): Not applicable

TLV: 5 mg/m³ (as Mo)

PEL: 5 mg/m³ (as Mo)

EU Occupational Exposure Limits: 5 mg/m³ as Mo

Demineralized Water

EEC Number: 2317912

CAS No.: 7732-18-5

Percent Range: 90,0 - 100,0

Percent Range Units: volume / volume

Ingredient EEC Symbol: Not applicable

Ingredient R phrase(s): Not applicable

TLV: Not established

PEL: Not established

EU Occupational Exposure Limits: Not established

Potassium Hydroxide

EEC Number: 2151813

CAS No.: 1310-58-3

Percent Range: < 1,0

Percent Range Units: weight / volume

Ingredient EEC Symbol: Not applicable

Ingredient R phrase(s): Not applicable

TLV: 2 mg/m³ Ceiling

PEL: 2 mg/m³ Ceiling

EU Occupational Exposure Limits: 2 mg/m³

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.

Skin Contact (First Aid): Wash skin with plenty of water for 15 minutes. Call physician if irritation develops.

Ingestion (First Aid): Do not induce vomiting. Give 1-2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn.

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

Extinguishing Media NOT To Be Used: Not applicable

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: 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. Adjust to a pH between 6 and 9. Use sulfuric or citric acid to lower pH. Use soda ash or sodium bicarbonate to increase pH. Dispose of material in an E.P.A. approved hazardous waste facility. 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.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Keep container tightly closed when not in use. Protect from: heat

Special Packaging Instructions: Not applicable

Use of the substance/preparation: Silica determination

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: chemical splash goggles

Skin / Hand Protection: disposable latex gloves
Inhalation Protection: adequate ventilation
Precautionary Measures: Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Protect from: heat
TLV: Not established
PEL: Not established
EU Occupational Exposure Limits: Not established

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid
Physical State: Liquid
Odor: None
pH: 11,2
Vapor Pressure: Not determined
Vapor Density (air = 1): Not determined
Boiling Point: 99° C (210° F)
Melting Point: Not determined
Flash Point: Not applicable
Method: Not applicable
Autoignition Temperature: Not applicable
Flammability Limits:
Lower Explosion Limits: Not applicable
Upper Explosion Limits: Not applicable
Specific Gravity (water = 1): 1,100
Evaporation Rate (water = 1): 0,96
Volatile Organic Compounds Content: Not applicable
Partition Coefficient (n-octanol / water): Not applicable
Solubility:
Water: Miscible
Acid: Miscible
Other: Not determined
Metal Corrosivity:
Steel: 0,057 in/yr
Aluminum: 0,016 in/yr

10. STABILITY / REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Conditions to Avoid: Evaporation Exposure to air.
Reactivity / Incompatibility: None reported
Hazardous Decomposition: None reported
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: Potassium Hydroxide: Skin human 50 mg/24H - SEVERE, Skin rabbit 50 mg/24H - SEVERE, Eye rabbit 1 mg/24H - SEVERE

Mutation Data: None reported
Reproductive Effects Data: None reported

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Ingredient Toxicological Data: Sodium Molybdate: Oral rat LD50 = 4000 mg/kg, Inhalation rat LC50 > 2080 mg/m³/4H

This product does NOT contain any IARC listed chemicals.

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

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. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

I.C.A.O.:
I.C.A.O. Proper Shipping Name: Not Currently Regulated
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ICAO Hazard Class: NA
ICAO Subsidiary Risk: NA
ICAO UN/ID Number: NA
ICAO Packing Group: NA

I.M.O.:
I.M.O. Proper Shipping Name: Not Currently Regulated
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I.M.O. Hazard Class: NA
I.M.O. Subsidiary Risk: NA
I.M.O. UN Number: NA
I.M.O. Packing Group: NA

A.D.R.:
A.D.R. Proper Shipping Name: Not Currently Regulated
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A.D.R Hazard Class: NA
A.D.R. Subsidiary Risk: NA
A.D.R. UN-Number:: NA
A.D.R. Packing Group: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories:

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.

EEC Number: Not applicable

EEC LABEL COPY:

EU Symbols: Not applicable

R PHRASES: Not applicable

S PHRASES: Not applicable

16. OTHER INFORMATION

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

Use of the substance/preparation: Silica determination

Revision Summary: Updates in Section(s) 14,

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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