SPECTRASCAN°

MATERIAL SAFETY DATA SHEET

according to EC Directive 2001/58/EC

SS-1141, SS-1241, SS-1541

Revision Number 1, Revision Date January 08, 2007

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

Product code	SS-1141 MO
Product name	1000 ug/mL Molybdenum
Common Name	Molybdenum in Water Trace Ammonium Hydroxide
Manufacturer, importer, supplie	<u>r</u> Teknolab
	P.O. Box 33
	1411 Kolbotn
	Norway
	Tel: + 47 66 81 34 70
	Fax: +47 66 81 34 71
	Web: www.spectrascan.no
Emergency telephone number	800-424-9300 CHEMTREC (24 hrs)

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH*	OSHA*
7732-18-5	Water	~95-99.9	N/A	N/A
1336-21-6	Ammonium hydroxide	<0.1	N/A	N/A
13106-76-8	Ammonium molybdate	~0.1-1	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction)	15 mg/m3 TWA (total dust)

* ACGIH - Occupational Exposure Limits - TWAs

* OSHA - Final PELs - Time Weighted Averages (TWAs)

3. HAZARDS IDENTIFICATION

Emergency OverviewFinal product is not reg	gulated		
Eye contact	Contact with eyes may cause irritation	on	
	4. FIRST AID MEASURES		
General advice	 Show this safety data sheet to the do 	octor in attendance	
Skin contact	Wash off immediately with soap and contaminated clothes and shoes	Wash off immediately with soap and plenty of water removing all	
Eye contact	 Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes 		
	 Keep eye wide open while rinsing 		
		If eye irritation persists, consult a specialist	
Inhalation	Move to fresh air		
Ingestion	 If conscious, drink plenty of water 		
	Consult a physician		
	5. FIRE-FIGHTING MEASURES		
Flash point	NA		
Suitable extinguishing m	• Use extinguishing media local circumstances and the surrounding enviro		
Specific hazards	None		
Specific methods	Fire residues and contaminated fire extinguishing		

regulations

 Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local

 As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES	
Personal precautions	Ensure adequate ventilation
Environmental precautions	Prevent further leakage or spillage if safe to do so
	Prevent product from entering drains
Methods for cleaning up	Dam up
	Pick up and transfer to properly labelled containers
	 Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container
	After cleaning, flush away traces with water

7. HANDLING AND STORAGE

Technical measures/Precautions	Use only in area provided with appropriate exhaust ventilation
Safe handling advice	Wear personal protective equipment

Storage

Technical measures/Precautions	 Keep in properly labelled containers Store at room temperature in the original container Keep containers tightly closed in a dry, cool and well-ventilated place
Incompatible products	No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment	
Hand protection	impervious gloves
Eye protection	tightly fitting safety goggles
Respiratory protection	Ensure adequate ventilation
Skin and body protection	Chemical resistant apron
	Lab coat
Hygiene measures	When using, do not eat, drink or smoke
	 Regular cleaning of equipment, work area and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

liquid.
clear
None.
None.

Important Health Safety and Environmental Information

рН	5 to 8
Boiling point/range	100°C
Flash point	N/A
Vapour pressure	NA.
Water solubility	miscible.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions
	 Hazardous polymerisation does not occur

Materials to avoid	No information available
Hazardous decomposition products	No information available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

CAS	Chemical Name	% Weight	LD50/oral/rat =	LD50/dermal/rat =
7732-18-5	Water	~95-99.9	N/A	N/A
1336-21-6	Ammonium hydroxide	<0.1	Oral LD50 Rat: 350 mg/kg	Oral LD50 Rat: 350 mg/kg
13106-76-8	Ammonium molybdate	~0.1-1	N/A	N/A

Product Information

Local effects	Poison
Eye irritation	May cause eye irritation with susceptible persons.
Ingestion	Harmful if swallowed.
Skin irritation	May cause skin irritation and/or dermatitis.
Chronic toxicity	Avoid repeated exposure. Overexposure may cause:. diarrhea. gastrointestinal disturbance.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Component Information

Product Information

Do not allow material to contaminate ground water or sewage system

Other information

13. DISPOSAL CONSIDERATIONS					
Waste from residues / unused products	In accordance with local and national regulations				
Contaminated packaging	 Empty containers should be taken for local recycling, recovery or waste disposal 				
14. TRANSPORT INFORMATION					
DOT	Final product is not regulated				

IATA-DGR

Final product is not regulated

15. REGULATORY INFORMATION

U.S. INVENTORIES:

CAS	Chemical Name	% Weight	CPCL*	NJRTK*	CERCLA/SARA*
7732-18-5	Water	~95-99.9	N/A	N/A	N/A
1336-21-6	Ammonium hydroxide	<0.1	N/A	sn 0103	1000 lb final RQ; 454 kg final RQ
13106-76-8	Ammonium molybdate	~0.1-1	N/A	sn 0105	N/A

* CPCL - California - Proposition 65 - Carcinogens List

* NJRTK - New Jersey - Department of Health RTK List

* CERCLA/SARA - Hazardous Substances and their Reportable Quantities

INTERNATIONAL INVENTORIES:

	CAS	Chemical Name	% Weight	WHMIS*	EINECCS - European Union*
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7732-18-5	Water	~95-99.9	Uncontrolled product according to WHMIS classification criteria	231-791-2
1336-21-6	Ammonium hydroxide	<0.1	D1B, E	215-647-6
13106-76-8	Ammonium molybdate	~0.1-1	Uncontrolled product according to WHMIS classification criteria	236-031-3

* WHMIS - Canada - WHMIS - Classifications of Substances

* EINECCS - European Union - European inventory of Existing Commercial Chemical Substances (EINECCS)

16. OTHER INFORMATION

The above information is believed to be accurate and represents the best information available to us. It has been compiled from the data presented in various technical publications and our experience and should only be used as a guide for handling this product. It is the user's responsibility to determine the suitability of this information for their particular purposes. We assume that only qualified individuals, trained and familiar with procedures suitable to this product will handle this material. Teknolab assumes no responsibility and shall not be held liable for any damage resulting from misuse of this product.