



# Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	1	Fire Hazard	0	Reactivity	0	 See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification			Page Number: 1	
Common Name/ Trade Name	Ammonium Tetrathiomolybdate		Catalog Number(s).	A2382
			CAS#	15060-55-6
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		RTECS	QA4668250
			TSCA	TSCA 8(b) inventory: Ammonium Tetrathiomolybdate
Commercial Name(s)	Not available.		CI#	Not available.
Synonym	Diammonium tetrathiomolybdate (2-); Molybdate (2-), tetrathio-, diammonium, (T-4)-; Ammonium molybdenum sulfide; Ammonium tetrasulfidomolybdate (2-); Ammonium tetrathiomolybdate (2-); Ammonium thiomolybdate (VI); Thiomolybdic acid, diammonium salt		<b><u>IN CASE OF EMERGENCY</u></b> <b><u>CHEMTREC (24hr) 800-424-9300</u></b>  CALL (310) 516-8000	
Chemical Name	Molybdate (2-), tetrathio-, diammonium, (T-4)-			
Chemical Family	Not available.			
Chemical Formula	H8-Mo-N2-S4			
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248			

Section 2. Composition and Information on Ingredients					
		Exposure Limits			
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Ammonium Tetrathiomolybdate	15060-55-6				100
Toxicological Data on Ingredients Not applicable.					

Section 3. Hazards Identification	
Potential Acute Health Effects	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

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**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

**Precautions** Do not breathe dust. Keep away from incompatibles such as oxidizing agents, acids.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Use a dust respirator if ventilation is inadequate and/or if handling of material generates visible dust clouds. Gloves.

**Personal Protection in Case of a Large Spill** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits** Not available.

**Section 9. Physical and Chemical Properties**

**Physical state and appearance** Solid. (Crystalline powder.)

**Odor** Not available.

**Molecular Weight** 260.27 g/mole

**Taste** Not available.

**pH (1% soln/water)** Not available.

**Color** Dark Red or Green or Purple or Black

**Boiling Point** Not available.

**Melting Point** 300°C (572°F)

**Critical Temperature** Not available.

**Specific Gravity** Not available.

**Vapor Pressure** Not applicable.

**Vapor Density** Not available.

**Volatility** Not available.

**Odor Threshold** Not available.

**Water/Oil Dist. Coeff.** Not available.

**Ionicity (in Water)** Not available.

**Dispersion Properties** Not available.

**Solubility** Not available.

**Section 10. Stability and Reactivity Data**

**Stability** The product is stable.

**Instability Temperature** Not available.

**Conditions of Instability** Incompatible materials, dust generation.

**Incompatibility with various substances** Reactive with oxidizing agents, acids.

**Corrosivity** Not available.

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Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

**Section 11. Toxicological Information**

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: Expected low hazard, low toxicity. May affect liver, urinary system, metabolism (iron metabolism).

**Section 12. Ecological Information**

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	Not available.

**Section 13. Disposal Considerations**

Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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**Section 14. Transport Information**

DOT Classification	Not a DOT controlled material (United States).
Identification	Not applicable.
Special Provisions for Transport	Not applicable.

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## DOT (Pictograms)



## Section 15. Other Regulatory Information and Pictograms

## Federal and State Regulations

TSCA 8(b) inventory: Ammonium Tetrathiomolybdate

## California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

## Other Regulations

Canada: Listed on Canadian Non-Domestic Substance List (NDSL)  
Korea: Listed on National Inventory (KECI).

## Other Classifications

**WHMIS (Canada)** Not controlled under WHMIS (Canada).**DSCL (EEC)** This product is not classified according to the EU regulations. Not applicable.

## HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

## National Fire Protection Association (U.S.A.)

Health	1	0	0	Flammability
				Reactivity
				Specific hazard

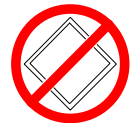
## WHMIS (Canada) (Pictograms)



## DSCL (Europe) (Pictograms)



## TDG (Canada) (Pictograms)



## ADR (Europe) (Pictograms)



## Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Safety glasses.

### Section 16. Other Information

**MSDS Code** A0270

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/8/2006.

CALL (310) 516-8000

#### Notice to Reader

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*