








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	<div></div> <div>See Section 15.</div>
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification			Page Number: 1
Common Name/ Trade Name	Ammonium Thiosulfate		Catalog Number(s). A1273
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		CAS# 7783-18-8
			RTECS XN6465000
			TSCA TSCA 8(b) inventory: Ammonium Thiosulfate
Commercial Name(s)	Thio-sul	CI#	Not available.
Synonym	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 CALL (310) 516-8000		
Chemical Name			
Chemical Family			
Chemical Formula			
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 ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) Ammonium Thiosulfate{2}	7783-18-8				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	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

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Section 4. First Aid Measures

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

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	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.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not readily combustible. When heated to decomposition (or in fires) it emits toxic fumes of ammonia, hydrogen sulfide, oxides of nitrogen, sulfur.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	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.
Large Spill	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 ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

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. 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. (Crystals solid. Crystalline powder.)	Odor	Ammoniacal.
Molecular Weight	148.21 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	White.
Boiling Point	Not available.		
Melting Point	Decomposition temperature: 150°C (302°F)		
Critical Temperature	Not available.		
Specific Gravity	Density: 1.679 (Water = 1)		
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	See solubility in water, acetone.		
Solubility	Easily soluble in cold water, hot water. Slightly soluble in acetone. Insoluble in diethyl ether. Solubility in water: 103.3 g/100 ml water @ 100 deg. C. Insoluble in alcohol		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Incompatible materials, moisture
Incompatibility with various substances	Reactive with oxidizing agents, metals, acids, alkalis.

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Ammonium Thiosulfate

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Corrosivity Not available.**Special Remarks on Reactivity** Incompatible with aluminum and magnesium.
Decomposes on heating.
Hygroscopic; keep container tightly closed.**Special Remarks on Corrosivity** Copper-based alloys are seriously corroded by ammonium thiosulfate**Polymerization** Will not occur.**Section 11. Toxicological Information****Routes of Entry** Inhalation. Ingestion.**Toxicity to Animals** Acute oral toxicity (LD50): 1098 mg/kg [Guinea pig].**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: Causes eye irritation.
Inhalation: Causes respiratory tract irritation.
Ingestion: May cause gastrointestinal tract irritation with diarrhea. May affect behavior/central nervous system (somnolence, convulsions, ataxia). respiration (emphysema), Kidneys (acute renal failure, acute tubular necrosis), blood (hemorrhage).
The toxicological properties of this substance have not been fully investigated.**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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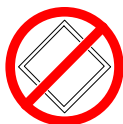
Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)

**Section 15. Other Regulatory Information and Pictograms**

Federal and State Regulations Illinois toxic substances disclosure to employee act: Ammonium Thiosulfate
 Pennsylvania RTK: Ammonium Thiosulfate
 Massachusetts RTK: Ammonium Thiosulfate
 Massachusetts spill list: Ammonium Thiosulfate
 New Jersey: Ammonium Thiosulfate
 TSCA 8(b) inventory: Ammonium Thiosulfate

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 EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications

WHMIS (Canada) Not controlled under WHMIS (Canada).

DSCL (EEC) This product is not classified according to the EU regulations. S24/25- Avoid contact with skin and eyes. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

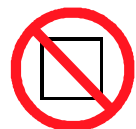
National Fire Protection Association (U.S.A.)

Health	1	0	Flammability
			Reactivity
			Specific hazard

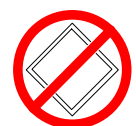
WHMIS (Canada) (Pictograms)



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** A5360**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 11/1/2004.

Verified by Sonia Owen.

Printed 1/24/2005.

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.