



Material Safety Data Sheet

NFPA 	HMIS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	Personal Protective Equipment  See Section 15.
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/ Trade Name	Sodium thiosulfate pentahydrate	Catalog Number(s). S1497, S1500, S1502, SO210
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	CAS# 10102-17-7
Commercial Name(s)	Ametox, Antichlor	RTECS WE6660000
Synonym	Sodium Hyposulfite, pentahydrate	TSCA TSCA 8(b) inventory: No products were found.
Chemical Name	Thiosulfuric Acid, disodium salt, pentahydrate	CI# Not available.
Chemical Family	Not available.	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 CALL (310) 516-8000
Chemical Formula	Na2S2O3.5H2O	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Sodium thiosulfate pentahydrate	10102-17-7				100
Toxicological Data on Ingredients		Sodium thiosulfate pentahydrate LD50: Not available. LC50: Not available.			

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).
Potential Chronic Health Effects	Slightly hazardous in case of skin contact (irritant, sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

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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. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
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	When heated to decomposition it emits toxic fumes of sulfur oxides, hydrogen sulfide, and sodium oxide
Special Remarks on Explosion Hazards	An explosion may occur if triturated with nitrates, chlorates, or permanganates.

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 breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents, acids, alkalis.
Storage	Hygroscopic. 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. 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.	Odor	Odorless.
Molecular Weight	248.19 g/mole	Taste	Saline.
pH (1% soln/water)	pH of a 5% solution: 6.0-8.4	Color	Colorless. White.
Boiling Point	>100°C (212°F)		
Melting Point	48°C (118.4°F)		
Critical Temperature	Not available.		
Specific Gravity	1.7 - 1.75(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.		
Solubility	Soluble in cold water, hot water. Solubility in water: 79 g/100 ml @ 4 deg. C (39 deg. F) 680 g/liter @ 20 deg. C		

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, acids, alkalis.

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Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	It is a strong reducing and can react with oxidizers. Reacts with acids to release sulfur dioxide. Sodium Thiosulfate pentahydrate dissolves in its own water of hydration; it effloresces in warm dry air. Sodium Thiosulfate pentahydrate loses water at 100 deg. C. It is incompatible with iodine, acids, lead, mercury, and silver salts (e.g. silver nitrate), halogens. Hygroscopic; keep container tightly closed. Protect from moisture
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	Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).
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: It may cause mild skin irritation. Eyes: Can cause mechanical eye irritation. Inhalation: May cause upper respiratory tract and mucous membrane irritation. Ingestion: Sodium Thiosulfate is an agent with a low order of toxicity. Ingestion of large doses may cause gastrointestinal irritation disturbances with nausea, vomiting, abdominal cramping, diarrhea, metabolic acidosis, and hypernatremia. May also affect respiration (cyanosis, respiratory stimulation), cardiovascular(hypotension), behavior (ataxia, convulsions) Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may allergic dermatitis, and irritation. 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.

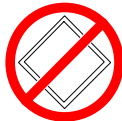
Section 14. Transport Information

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 No products were found.

California Proposition 65 Warnings

Other Regulations Not available.

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. S28- After contact with skin, wash immediately with plenty of water. S37- Wear suitable gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	0
Reactivity	0
Personal Protection	E

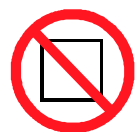
National Fire Protection Association (U.S.A.)

Health 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. Wear appropriate respirator when ventilation is inadequate.



Safety glasses.

Section 16. Other Information

MSDS Code S4600

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 3/5/2003.

Verified by Sonia Owen.

Printed 8/26/2004.

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.