

060984

SECTION I NAME

Product	SODIUM THIOSULFATE, PENTAHYDRATE	CHEMTREC 800-424-9300	Health 1
Chemical Synonyms	Sodium Thiosulfate, Pentahydrate	Dom 716-326-6177	Fire 0
Formula	Na ₂ S ₂ O ₃ ·5H ₂ O	Ngh 716-334-4222	Reactivity 1
Units Size	100, 500 grams, 2.5 kg.		
C.A.S. No.	10102-17-7		

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	%	TLV Units
Sodium Thiosulfate, Pentahydrate	100%	None established

WARNING! HARMFUL IF SWALLOWED.

SECTION III PHYSICAL DATA

Melting Point (°F)	Rapidly heated at 48°C	Specific Gravity (H ₂ O = 1)	1.69 at 20°C
Boiling Point (°F)	Losses water above 100°C	Percent Volatile by Volume (%)	Non-volatile (NA)
Vapor Pressure (mm Hg)	Negligible as solid	Evaporation Rate	Non-volatile (NA)
Vapor Density (Air = 1)	5.47		
Solubility in Water	200 grams per 100 ml water at 20°C.		
Appearance and Odor	Clear to white crystals or granules with no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA)	Flammable Limits in Air % by Volume	Lower: Upper:
Extinguisher	Use any media suitable for extinguishing supporting fire.		

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH-approved self-contained breathing apparatus. Use water spray to keep containers cool, and to knock down flames.

UNUSUAL FIRE AND EXPLOSION HAZARDS

High temperatures may cause evolution of toxic sulfur dioxide (SO₂) or Hydrogen sulfide gas (H₂S).

D.O.T. NON-REGULATED

Freay FREY SCIENTIFIC
905 HICKORY LANE MANSFIELD OHIO 44905
MSDS No. Effective Date

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

None established. (ACGIH 1963-85).

Effects of Overexposure

INHALATION: Of product dust or mist, may irritate respiratory tract; **INGESTION:** May cause irritation of the gastrointestinal tract and purging. **SKIN:** Dust or mist may cause irritation from prolonged contact. Aqueous solutions may cause irritation from repeated or prolonged contact. **EYES:** Dust or mist may irritate or burn eyes. Solutions may irritate or burn eyes.

Emergency and First Aid Procedures

EYES: Flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention. **SKIN:** Flush skin, or wash with soap and water. **INHALATION:** Remove to fresh air. If short of breath, give oxygen, provided a qualified operator is available. If symptoms persist, get medical attention. **INGESTION:** Promptly give two to four glasses of water and induce vomiting by touching finger to back of throat. Call physician.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	High temperatures (above 100° C); Yields sulfur dioxide gas and hazardous residue.
	Stable		
Incompatibility (Materials to avoid)	X		Strong oxidizers: Causes vigorous exothermic reaction. Acids: Release sulfur dioxide gas. Water-reactive materials such as sodium: cause strong exothermic reaction with the hydrate.
Hazardous Decomposition Products			Sulfur dioxide gas: Toxic, corrosive and an oxidizer. Sodium sulfide residue: Flammable, dangerous, fire risk, strong irritant to skin and tissue, incompatible with acids.
Hazardous Polymerization		Conditions to Avoid	
May Occur	Will Not Occur		Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Sweep up and place in a suitable container.

Waste Disposal Method

Dispose of in an approved incinerator equipped with an afterburner and scrubber. Dissolve in water and flush to sewer with copious amounts of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

Respiration Protection: None shown to be needed in normal laboratory use. If dust by conditions prevail, work in fume hood or wear a NIOSH-approved respirator for dust.

Ventilation (Specify Type)	Local Exhaust	Recommended	Special	Other
Protective Gloves	Rubber			
Other Protective Equipment	Goggles, smock, apron, proper gloves, eye wash station.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing

Store in a cool, dry place away from acids or oxidizers. Avoid contact with eyes, skin, clothing. Avoid breathing dust or mist. Use with adequate ventilation.

Other Precautions

Read label on container before using. Contact with acids releases irritating sulfur dioxide gas.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. *1/2/87* Date *1/2/87* Approved *Wanda L. ...* Chemical Safety Coordinator

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