



Safety Data Sheet



Sodium Thiosulfate Pentahydrate

1. Product Identification

Product Name: Sodium thiosulfate pentahydrate

Synonyms: Ametox, Antichlor; Sodium Hyposulfite, pentahydrate

Recommended Use: Laboratory chemicals, Manufacture of substances

Supplier Information:

Global Chemical Resources

1925 Nebraska Avenue

Toledo, OH 43607

Phone: 419-242-1004

Fax: 419-241-0668

Emergency Contact Information:

24 Hour Chemical Emergency. Call CHEMTREC: 800-424-9300

2. Hazard(s) Identification

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

Label elements

This substance is not classified as dangerous according to Directive 67/548/EEC.

Other Hazards - None

3. Composition/Information on Ingredients

Formula: $\text{Na}_2\text{O}_3\text{S}_2 \cdot 5\text{H}_2\text{O}$

Molecular Weight: 248.18 g/mol

Name	CAS #	% by Weight
Sodium Thiosulfate Pentahydrate	10102-17-7	100

Toxicological Data on Ingredients: Sodium thiosulfate pentahydrate LD50: Not available.
LC50: Not available.

4. First-Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Indication of any immediate medical attention and special treatment needed

no data available

5. Fire-Fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Sulphur oxides, Sodium/sodium oxides Nature of decomposition products not known. Sulphur oxides, Sodium oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

The product itself does not burn.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up

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.

7. Handling and Storage

Precautions for safe handling

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.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end uses

no data available

8. Exposure Controls/Personal Protection

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 480 min

Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 30 min

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. Physical and Chemical Properties

Appearance:	Powder with lumps, colorless
Odor:	Odorless
Odor Threshold:	No Data Available
pH:	pH of a 5% solution: 6.0-8.4
Melting/Freezing Point:	48°C (118.4°F)
Initial boiling Point and Range:	>100°C (212°F)
Flash Point:	No Data Available
Evaporation Rate:	No Data Available
Flammability:	No Data Available
Upper/Lower Flammability Limits:	No Data Available
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Relative Density:	No Data Available
Partition Coefficient:	No Data Available
Auto-Ignition Temperature:	No Data Available
Decomposition Temperature:	No Data Available
Viscosity:	No Data Available
Specific Gravity:	1.7 - 1.75(Water = 1)
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

10. Stability and Reactivity

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.

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.

11. Toxicological Information

Acute toxicity: LD50 Intravenous - rat - > 2.500 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific Target Organ Toxicity

Single Exposure: no data available

Repeated Exposure: no data available

Aspiration Hazard: no data available

Potential health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed

Skin May be harmful if absorbed through skin. May cause skin irritation

Eyes May cause eye irritation

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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.

13. Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. Transportation Information

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

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15. Regulatory Information

Federal and State Regulations: No products were found.

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: 2

Flammability: 0

Reactivity: 0

Specific hazard:

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.

16.

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