MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**SODIUM THIOSULFATE SOLUTION, 0.1 N**
Catalog #	736
Version #	02
Revision date	23-Nov-2009
CAS #	Mixture
Manufacturer information	GFS Chemicals, Inc. P.O. Box 245 Powell, OH 43065 US www.gfschemicals.com Fax 740-881-5989 Phone 740-881-5501 Toll Free 800-858-9682 Emergency Assistance Chemtrec 800-424-8300

2. Hazards Identification

Emergency overview	May cause skin and eye irritation.
OSHA regulatory status	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Not applicable.
Eyes	May irritate eyes.
Skin	May cause skin irritation.
Inhalation	Health injuries are not known or expected under normal use.
Ingestion	Ingestion of large amounts may cause nausea and abdominal pain.
Potential environmental effects	Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
WATER	7732-18-5	90 - 100
SODIUM THIOSULFATE, PENTAHYDRATE	10102-17-7	2.5 - 10

4. First Aid Measures

First aid procedures	
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
General advice	If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties	No unusual fire or explosion hazards noted. The product is not flammable.
Extinguishing media	
Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2).

Protection of firefighters

Protective equipment and precautions for firefighters	In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.
Specific methods	In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for containment	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
Methods for cleaning up	Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Never return spills in original containers for re-use.

7. Handling and Storage

Handling	Handle and open container with care.
Storage	Use care in handling/storage.

8. Exposure Controls / Personal Protection

Personal protective equipment

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Rubber gloves.
Eye / face protection	Wear chemical goggles.
Skin protection	No special protective equipment required.
General hygeine considerations	Handle in accordance with good industrial hygiene and safety practice.
General	Not normally needed.

9. Physical & Chemical Properties

Appearance	Clear.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	7 - 8
Melting point	< 32 °F (< 0 °C)
Freezing point	Not available.
Boiling point	> 212 °F (> 100 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	1.01

Relative density	1.01 g/cm3
Solubility (water)	completely miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Percent volatile	> 97 %
Molecular weight	248.1800 g/mol
Molecular formula	Na2S2O3.5H2O

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions. No hazardous self-reactivity.
Incompatible materials	None known.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological Information

Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Further information	This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity This product has no known eco-toxicological effects.

Micro-organisms Toxicity: LC 50

SODIUM THIOSULFATE, PENTAHYDRATE	10102-17-7	Protozoa (Spirostomum ambiguum) 1710 mg/l 24 h Static Mortality
SODIUM THIOSULFATE, PENTAHYDRATE	10102-17-7	Protozoa (Spirostomum ambiguum) 1700 mg/l 48 h Static Mortality

Persistence and degradability Not available.

13. Disposal Considerations

Disposal instructions	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not applicable.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 0
Flammability: 0
Physical hazard: 1

NFPA ratings
Health: 0
Flammability: 0
Instability: 1

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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This data sheet contains changes from the previous version in section(s): This document has undergone significant changes and should be reviewed in its entirety.