



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** SODIUM THIOSULFATE SOLUTION, 1.0 N  
**Catalog #** 1195  
**Version #** 02  
**Revision date** 23-Nov-2009  
**CAS #** Mixture  
**Manufacturer information** GFS Chemicals, Inc.  
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Powell, OH 43065 US  
www.gfschemicals.com  
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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	60 - 80
SODIUM THIOSULFATE, PENTAHYDRATE	10102-17-7	20 - 40

## 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<sub>2</sub>).

## 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 hygiene 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** 1.12

<b>Relative density</b>	1.12 g/cm <sup>3</sup>
<b>Solubility (water)</b>	completely miscible
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Percent volatile</b>	> 75 %
<b>Molecular weight</b>	248.1800 g/mol
<b>Molecular formula</b>	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ·5H <sub>2</sub> O

## 10. Chemical Stability & Reactivity Information

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

## 11. Toxicological Information

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

## 12. Ecological Information

<b>Ecotoxicity</b>	This product has no known eco-toxicological effects.	
<b>Micro-organisms Toxicity: LC 50</b>		
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
<b>Persistence and degradability</b>	Not available.	

## 13. Disposal Considerations

<b>Disposal instructions</b>	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.
<b>Waste from residues / unused products</b>	Not applicable.

## 14. Transport Information

<b>DOT</b>	Not regulated as dangerous goods.
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## 15. Regulatory Information

<b>US federal regulations</b>	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.
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CERCLA/SARA Hazardous Substances - Not applicable.

### CERCLA (Superfund) reportable quantity

None

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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**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.

#### Issue date

23-Nov-2009

#### 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.