Section 1 - Product and Company Identification

Product Name: Sodium Thiosulfate Solution  
Chemical Formula: Na₂S₂O₃  
CAS Number: 00772-98-7  
General Use: Waste water dechlorination agent and lab reagent  
Supplier: Skyhawk Chemicals, Inc.  
701 N Post Oak Rd., Ste. 540  
Houston, TX 77024  
Telephone: 713-957-2200/800-535-2847  
Fax: 713-957-0345  
Email: order@skyhawkchemicals.com  
Emergency Contact: CHEMTREC/800-424-9300/ACCT #: CCN721839

Section 2 - Hazards Identification

Emergency Overview  
Target Organs: None  
GHS Classification: Not a dangerous substance or mixture  
GHS Label Elements: None  
Hazard Statements: None  
Precautionary Statements: None

HMIS Classification: Health Hazard 1  
Flammability 0  
Reactivity 0

Potential Health Effects:  
Inhalation: Irritant  
Eye: Irritant  
Skin: Irritant  
Ingestion: Harmful if swallowed

Medical Condition aggravated by long term exposure - Capable of provoking bronchospasm in sulfite sensitive individuals with asthma.

Section 3 – Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Composition</th>
<th>CAS Number</th>
<th>% Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Thiosulfate</td>
<td>10102-17-7</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40 - 70</td>
</tr>
<tr>
<td>Sodium Sulfite</td>
<td>7757-83-7</td>
<td>1.5</td>
</tr>
<tr>
<td>Sodium Sulfate</td>
<td>7757-82-6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures
### Exposure Route | Symptom | Treatment
--- | --- | ---
Inhalation: | Sore throat, shortness of breath coughing, and congestion. | Remove from exposure to fresh air. Seek medical attention in severe cases or if recovery is not rapid.
Eye Contact: | Irritation to eyes and mucous membranes. | Irrigate with water until no evidence of chemical remains. Obtain medical attention.
Skin Contact: | Irritation, itching, dermatitis | Wash with soap and drench with water. Remove contaminated clothing and wash before reuse.
Ingestion: | Irritation to mucous membranes. | Give large quantities of water or milk immediately. Obtain medical attention.

After first aid, get appropriate medical attention.
Note to Physician: Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.

### Section 5 - Fire-Fighting Measures

- **Flash Point:** Not combustible.
- **Flash Point Method:** Not Applicable.
- **Burning Rate:** Not Applicable.
- **Auto Ignition Temperature:** Not Applicable.
- **LEL:** Not Applicable.
- **UEL:** Not Applicable.
- **Flammability Classification:** Not Flammable.
- **Extinguishing Media:** Use extinguishing agent appropriate for surrounding fire conditions.
- **Unusual Fire or Explosion Hazards:** None indicated.
- **Hazardous Combustion Products:** May release hazardous gas.
- **Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

### Section 6 - Accidental Release Measures

- **Spill / Leak Procedures:** Wear appropriate PPE - See Section 8.
- **Small Spills / Leaks:** Leaks may be located by spraying the area with ammonium hydroxide solution which forms a white fume in the presence of sulfur dioxide.
- **Large Spills / Leaks:** Large spills should be handled according to a predetermined plan. For large spills, dike far ahead of contaminated runoff for later disposal.

### Section 7 - Handling and Storage

- **Handling Precautions:** Avoid contact with product. Do not breathe vapor.
- **Storage Requirements:** Avoid heat or moisture. Store in areas, away from heat and moisture and protected from physical damage. Segregate from acids and oxidizers.
Section 8 - Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Composition</th>
<th>CAS Number</th>
<th>TWA</th>
<th>STEL</th>
<th>IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Sulfite</td>
<td>007757-83-7</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Sulfate</td>
<td>007757-82-6</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* None established. Control as nuisance dust.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA limits (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at the source.

Respiratory Protection: Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear a SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Protective Clothing / Equipment: Wear protective gloves, boots, and clothing when necessary to prevent excessive skin contact. Wear protective eyeglasses or goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133).

Safety Stations: Make emergency eyewash stations, showers, and washing facilities available in the work area.

Contaminated Equipment: Remove this material from personal protective equipment as needed.

Comments: Do not eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before food or beverage consumption.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
<th>Water Solubility: Completely miscible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Solubility:</td>
<td>NA</td>
<td>Odor Threshold: None</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Similar to water</td>
<td>Vapor Pressure: Similar to water</td>
</tr>
<tr>
<td>Freezing Point:</td>
<td>Similar to water</td>
<td>Vapor Density: Similar to water</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>Similar to water</td>
<td>Evaporation Rate: Normal</td>
</tr>
<tr>
<td>Density:</td>
<td>NA</td>
<td>pH: 6.5 – 8.0</td>
</tr>
<tr>
<td>Volatility:</td>
<td>30 – 70 %</td>
<td></td>
</tr>
</tbody>
</table>

Section 10 - Stability & Reactivity

Stability: Stable under normal conditions.
Polymerization: Hazardous polymerization will not occur.
Chemical Incompatibilities: Sodium sulfite may, in acidic solutions, release toxic and hazardous fumes of sulfur oxides, including sulfur dioxide. Acute poisoning from sulfur dioxide is rare because the gas is easily detected. It is so irritating that
Safety Data Sheet
SODIUM THIOSULFATE SOLUTION

contact cannot be tolerated. Symptoms include coughing, hoarseness, sneezing, tearing, and breathing difficulty. However, workers who cannot escape high accidental exposure may suffer severe pulmonary damage which can be fatal. Contact with powdered potassium, sodium metals, alkali, and oxidizing agents produce violent reactions. Reacts with water and steam to form corrosive sulfurous acid. Reacts with chlorates to form unstable chlorine dioxide.

**Conditions to Avoid:** Avoid excessive heat, or open flame.

**Hazardous Decomposition Products:** May release hazardous sulfur dioxide gas.

**Section 11 - Toxicological Information**

**Eye Effects (rabbit):** Not available. **Acute Inhalation Effects (rabbit):** Not Available **Skin Effects (rabbit):** Not available **Acute Oral Effects (rabbit):** LD50 = Not Available

**Carcinogenicity:** IARC, NTP, and OSHA do not list Sodium Sulfite as a carcinogen.

**Chronic Effects:** Prolonged or repeated exposure may cause dermatitis, and sensitization reactions. Exposure to asthmatic, atopic and sulfite sensitive individuals may result in severe bronchoconstriction and reduced levels in forced expiratory volume. Acidic decomposition of sodium sulfite may release toxic and hazardous fumes of sulfur oxides, including sulfur dioxide, which may cause permanent pulmonary impairments from acute and chronic exposure.

**Section 12 - Ecological Information**

**Ecotoxicity:** Sodium Sulfite is non hazardous in solution and is commonly used as a waste water dechlorination agent. High concentrations will contribute to elevated chemical oxygen demand in aquatic environments.

**Environmental Transport:** Soluble in water.

**Environmental Degradation:** Rapid biological decomposition.

**Soil Absorption/Mobility:** Slight.

**Section 13 - Disposal Considerations**

**Disposal:** Waste determinations typically consider Sodium Sulfite contaminated materials to be non-hazardous.

**Disposal Regulatory Requirements:** Follow applicable Federal, state and local regulations.

**Container Cleaning and Disposal:** Follow applicable Federal, state and local regulations.

**Section 14 - Transport Information**

**DOT Transportation Data (49 CFR 172.101):**

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>Non-Regulated Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Symbols:</td>
<td>NA</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>NA</td>
</tr>
<tr>
<td>Subsidiary Hazard:</td>
<td>NA</td>
</tr>
<tr>
<td>ID No.:</td>
<td>NA</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>NA</td>
</tr>
<tr>
<td>Label:</td>
<td>NA</td>
</tr>
<tr>
<td>Special Provisions:</td>
<td>None indicated</td>
</tr>
</tbody>
</table>
Section 15 - Regulatory Information

EPA Regulations:
CERCLA Reportable Quantity (RQ): NA
SARA Title III: Not listed. FIFRA:
Not regulated. TSCA: All
Ingredients listed OSHA Regulations:
OSHA Specifically Regulated Substance: Not listed.
Other Regulations:
WHMIS Classification (Canada): Not listed

Section 16 - Other Information

Previous MSDS issue date: April, 2012
Current SDS issue date: May, 2015
Reason for current revision: To comply with GHS requirements.

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