CAUTIONARY RESPONSE INFORMATION

**Common Synonyms**
Sodium bisulfite solution

**Liquid**
Pale yellow
Pungent odor of sulfur dioxide

- Wear chemical splash goggles and rubber gloves.
- Restrict access.
- Avoid contact with liquid and vapor.
- Notify local health and pollution control agencies.
- Protect water intakes.

**Fire**
Not flammable.

- Use extinguishing agents appropriate for the surrounding fire.
- Cool exposed containers with water spray.

**Exposure**
CALL FOR MEDICAL AID.

- **LIQUID**
  - Irritating to skin and eyes.
  - Flash affected areas with plenty of water.
  - IF IN EYES, hold eyelids open and flush with plenty of water.

**Water Pollution**
Effect of low concentrations on aquatic life is unknown.

- May be dangerous if it enters water intakes.
- Notify local health and wildlife officials.
- Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS
- Stop discharge
- Dilute and disperse
- Protect water intakes.
- Notify local health and pollution control agencies.

2. CHEMICAL DESIGNATIONS
- **CG Compatibility Group:** 43;
  - Miscellaneous Water Solutions
- **Formula:** NaHSO\(_3\)
- **IMO/UN Designation:** Not listed.
- **DOT ID No.:** 2693
- **CAS Registry No.:** 7631-90-5
- **NAPER Guide No.:** 154
- **Standard Industrial Trade Classification:** 52344

3. HEALTH HAZARDS
- **Personal Protective Equipment:** Wear chemical splash goggles or face shield and chemical protective gloves.
- **Symptoms Following Exposure:** Solution is irritating to eyes, nose, and throat and can irritate skin. Ingestion may cause irritation of stomach.
- **Treatment of Exposure:** Get medical attention. SKIN: Wash with plenty of water. EYES: Flush with plenty of water for at least 15 minutes.
- **TLV-TWA:** 8 mg/m\(^3\)
- **TLV-STEL:** Not listed.
- **Toxicity by Ingestion:** Grade 2; LD\(_50\) = 2.0 g/kg (rat)
- **Toxicity by Inhalation:** Currently not available.
- **Chronic Toxicity:** None
- **Liquid or Solid Characteristics:** Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.
- **Odor Threshold:** Currently not available.
- **OSHA PEL-TWA:** Not listed.
- **OSHA PEL-STEL:** Not listed.
- **OSHA PEL-Ceiling:** Not listed.
- **EPA AEGL:** Not listed.

4. FIRE HAZARDS
- **Flash Point:** Not flammable.
- **Fire Extinguishing Agents:** Use extinguishing agents appropriate for the surrounding fire.
- **Fire Extinguishing Agents Not to Be Used:** Not pertinent.
- **Special Hazards of Combustion Products:** Decomposes with heat or oxidizing agents, releasing sulfur dioxide gas.
- **Behavior in Fire:** Not pertinent.
- **Auto Ignition Temperature:** Not pertinent.
- **Electrical Hazards:** Not pertinent.
- **Burning Rate:** Not pertinent.
- **Adiabatic Flame Temperature:** Not pertinent.
- **Stoichiometric Air to Fuel Ratio:** Not pertinent.
- **Flame Temperature:** Not pertinent.
- **Combustion Molar Ratio (Reactant to Product):** Not pertinent.
- **Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

5. CHEMICAL REACTIVITY
- **Reactivity with Water:** No reaction.
- **Reactivity with Common Materials:** Not compatible with oxidizing agents.
- **Stability During Transport:** Stable.
- **Neutralizing Agents for Acids and Caustics:** Not pertinent.
- **Polymerization:** Will not polymerize.
- **Inhibitor of Polymerization:** Not pertinent.

6. WATER POLLUTION
- **Aquatic Toxicity:** Not pertinent.
- **Waterfowl Toxicity:** Currently not available.
- **Biological Oxygen Demand (BOD):** 6.3
- **Food Chain Concentration Potential:** None.
- **GESAMP Hazard Profile:** None.
- **Dissolved Oxygen:** 6.0
- **pH:** 6.8
- **Alkalinity:** Not pertinent.
- **Bioaccumulation:** None.
- **Toxicity:** 240 ppm for mosquitofish.
- **Residual persistence:** Not pertinent.
- **Recovery:** Not pertinent.
- **Maximum Allowable Concentration:** Not pertinent.

7. SHIPPING INFORMATION
- **Grades of Purity:** Technical and photographic grades.
- **Storage Temperature:** Ambient.
- **Inert Atmosphere:** No requirement.
- **Venting:** Open.
- **IMO Pollutant Category:** D
- **Shippers:** Not listed.
- **Barge Hull Type:** Currently not available

8. HAZARD CLASSIFICATIONS
- **49 CFR Category:** Corrosive Material
- **49 CFR Class:** II
- **49 CFR Package Group:** III
- **Marine Pollutant:** No
- **NFPA Hazard Classification:** Not listed.
- **EPA Reportable Quantity:** Not listed.
- **EPA Pollution Category:** Not listed.
- **RCRA Waste Number:** Not listed.
- **EPA FWPCA List:** Not listed.

9. PHYSICAL & CHEMICAL PROPERTIES
- **Physical State at 15°C and 1 atm:** Liquid
- **Molecular Weight:** 104.06
- **Boiling Point at 1 atm:** 241°F = 110°C = 373 K
- **Freezing Point:** -1.9°C = -279°F
- **Critical Temperature:** Currently not available
- **Critical Pressure:** Currently not available
- **Specific Gravity:** 3.9 at 25°C
- **Liquid Surface Tension:** Currently not available
- **Liquid Water Interfacial Tension:** Currently not available
- **Vapor (Gas) Specific Gravity:** 2.2
- **Ratio of Specific Heats of Vapor (Gas):** Currently not available
- **Latent Heat of Vaporization:** Currently not available
- **Heat of Combustion:** Currently not available
- **Heat of Decomposition:** Currently not available
- **Heat of Solution:** Currently not available
- **Heat of Polymerization:** Not pertinent
- **Heat of Decomposition:** Not pertinent
- **Heat of Fusion:** Currently not available
- **Limiting Values:** Currently not available
- **Reid Vapor Pressure:** Currently not available

NOTES
### Table: SODIUM HYDROGEN SULFITE SOLUTION (35% OR LESS) Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Temperature (degrees F)</th>
<th>Pounds per cubic foot</th>
<th>British thermal unit per pound-F</th>
<th>Temperature (degrees F)</th>
<th>British thermal unit inch per hour-square foot-F</th>
<th>Temperature (degrees F)</th>
<th>Centipoise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saturated Liquid Density</strong></td>
<td>77</td>
<td>11.350</td>
<td>CURRENTLY NOT AVAILABLE</td>
<td></td>
<td>CURRENLY NOT AVAILABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid Heat Capacity</strong></td>
<td></td>
<td>CURRENTLY NOT AVAILABLE</td>
<td></td>
<td></td>
<td>CURRENLY NOT AVAILABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid Thermal Conductivity</strong></td>
<td></td>
<td>CURRENTLY NOT AVAILABLE</td>
<td></td>
<td></td>
<td>CURRENLY NOT AVAILABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid Viscosity</strong></td>
<td></td>
<td>CURRENTLY NOT AVAILABLE</td>
<td></td>
<td></td>
<td>CURRENLY NOT AVAILABLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Solubility in Water</strong></td>
<td></td>
<td>MISCELLANEOUS</td>
<td></td>
<td></td>
<td>MISCELLANEOUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Saturated Vapor Pressure</strong></td>
<td>100</td>
<td>1.509</td>
<td></td>
<td>100</td>
<td>0.02612</td>
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<tr>
<td><strong>Saturated Vapor Density</strong></td>
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<td>MISCELLANEOUS</td>
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<tr>
<td><strong>Ideal Gas Heat Capacity</strong></td>
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<td></td>
<td></td>
<td>MISCELLANEOUS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table provides properties of Sodium Hydrogen Sulfite Solution at specified temperatures and conditions. The units and values are consistent with the context of the properties measured.