

# SODIUM BISULFITE

SBS

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Sodium acid sulfite Sodium metabisulfite Sodium pyrosulfite		Solid powder or granules	White	Odorless to irritating odor
Sinks and mixes with water.				
Keep people away. Avoid contact with solid and dust. Notify local health and pollution control agencies. Protect water intakes.				
<b>Fire</b>	Not flammable.			
<b>Exposure</b>	CALL FOR MEDICAL AID. DUST Harmful if inhaled. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.  SOLID Irritating to skin and eyes. Harmful if swallowed. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.			
<b>Water Pollution</b>	Dangerous to aquatic life in high concentrations. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.			

### 1. CORRECTIVE RESPONSE ACTIONS

Dilute and disperse  
 Stop discharge  
 Collection Systems: Dredge

### 2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.  
 2.2 Formula:  $\text{NaHSO}_3 \cdot \text{Na}_2\text{S}_2\text{O}_5$   
 2.3 IMO/UN Designation: Not listed  
 2.4 DOT ID No.: Not listed.  
 2.5 CAS Registry No.: 7631-90-5  
 2.6 NAERG Guide No.: Not listed.  
 2.7 Standard Industrial Trade Classification: 52344

### 3. HEALTH HAZARDS

- 3.1 **Personal Protective Equipment:** Dust mask; goggles or face shield.  
 3.2 **Symptoms Following Exposure:** Powder is irritating to eyes, nose, and throat and can irritate skin. Ingestion may cause irritation of stomach. Very large doses cause violent colic, diarrhea, depression, and death.  
 3.3 **Treatment of Exposure:** INHALATION OR INGESTION: get medical attention at once. SKIN: wash with plenty of water. EYES: flush with plenty of water for at least 15 min. and get medical attention at once.  
 3.4 TLV-TWA: 5 mg/m<sup>3</sup>  
 3.5 TLV-STEL: Not listed.  
 3.6 TLV-Ceiling: Not listed.  
 3.7 **Toxicity by Ingestion:** Grade 2; LD<sub>50</sub> = 0.5 to 5 g/kg  
 3.8 **Toxicity by Inhalation:** Currently not available.  
 3.9 **Chronic Toxicity:** None  
 3.10 **Vapor (Gas) Irritant Characteristics:** Non-volatile  
 3.11 **Liquid or Solid Characteristics:** Irritates skin and mucous membranes.  
 3.12 **Odor Threshold:** Currently not available  
 3.13 **IDLH Value:** Not listed.  
 3.14 **OSHA PEL-TWA:** Not listed.  
 3.15 **OSHA PEL-STEL:** Not listed.  
 3.16 **OSHA PEL-Ceiling:** Not listed.  
 3.17 **EPA AEGL:** Not listed

### 4. FIRE HAZARDS

- 4.1 **Flash Point:** Not flammable  
 4.2 **Flammable Limits in Air:** Not flammable  
 4.3 **Fire Extinguishing Agents:** Not pertinent  
 4.4 **Fire Extinguishing Agents Not to Be Used:** Not pertinent  
 4.5 **Special Hazards of Combustion Products:** Not pertinent  
 4.6 **Behavior in Fire:** Not pertinent  
 4.7 **Auto Ignition Temperature:** Not flammable  
 4.8 **Electrical Hazards:** Not pertinent  
 4.9 **Burning Rate:** Not flammable  
 4.10 **Adiabatic Flame Temperature:** Currently not available  
 4.11 **Stoichiometric Air to Fuel Ratio:** Not pertinent.  
 4.12 **Flame Temperature:** Currently not available  
 4.13 **Combustion Molar Ratio (Reactant to Product):** Not pertinent.  
 4.14 **Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

### 5. CHEMICAL REACTIVITY

- 5.1 **Reactivity with Water:** No reaction  
 5.2 **Reactivity with Common Materials:** No reaction  
 5.3 **Stability During Transport:** Stable  
 5.4 **Neutralizing Agents for Acids and Caustics:** Not pertinent  
 5.5 **Polymerization:** Not pertinent  
 5.6 **Inhibitor of Polymerization:** Not pertinent

### 6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:** 240 ppm/24, 48, & 96 hr/mosquito fish/TL<sub>m</sub>/fresh water  
 6.2 **Waterfowl Toxicity:** Currently not available  
 6.3 **Biological Oxygen Demand (BOD):** Reacts chemically with dissolved oxygen even in absence of seeded organisms.  
 6.4 **Food Chain Concentration Potential:** None  
 6.5 **GESAMP Hazard Profile:** Not listed

### 7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Various grades (87-100%)  
 7.2 **Storage Temperature:** Ambient  
 7.3 **Inert Atmosphere:** No requirement  
 7.4 **Venting:** Open  
 7.5 **IMO Pollution Category:** Currently not available  
 7.6 **Ship Type:** Currently not available  
 7.7 **Barge Hull Type:** Currently not available

### 8. HAZARD CLASSIFICATIONS

- 8.1 **49 CFR Category:** Not listed.  
 8.2 **49 CFR Class:** Not pertinent  
 8.3 **49 CFR Package Group:** Not listed.  
 8.4 **Marine Pollutant:** No  
 8.5 **NFPA Hazard Classification:** Not listed  
 8.6 **EPA Reportable Quantity:** 5000 pounds  
 8.7 **EPA Pollution Category:** D  
 8.8 **RCRA Waste Number:** Not listed  
 8.9 **EPA FWPCA List:** Yes

### 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 **Physical State at 15° C and 1 atm:** Solid  
 9.2 **Molecular Weight:** 104.06  
 9.3 **Boiling Point at 1 atm:** Decomposes  
 9.4 **Freezing Point:** Not pertinent  
 9.5 **Critical Temperature:** Not pertinent  
 9.6 **Critical Pressure:** Not pertinent  
 9.7 **Specific Gravity:** 1.48 at 20°C (solid)  
 9.8 **Liquid Surface Tension:** Not pertinent  
 9.9 **Liquid Water Interfacial Tension:** Not pertinent  
 9.10 **Vapor (Gas) Specific Gravity:** Not pertinent  
 9.11 **Ratio of Specific Heats of Vapor (Gas):** Not pertinent  
 9.12 **Latent Heat of Vaporization:** Not pertinent  
 9.13 **Heat of Combustion:** Not pertinent  
 9.14 **Heat of Decomposition:** Not pertinent  
 9.15 **Heat of Solution:** Not pertinent  
 9.16 **Heat of Polymerization:** Not pertinent  
 9.17 **Heat of Fusion:** Currently not available  
 9.18 **Limiting Value:** Currently not available  
 9.19 **Reid Vapor Pressure:** Currently not available

### NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
77	25.000		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T