

# Material Safety Data Sheet

## Sodium bisulfite

ACC# 21001

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium bisulfite**Catalog Numbers:** AC223070000, AC223070010, AC419440000, AC419440010, AC419440025, AC419440050, AC419441000, S654-3, S654-3LC, S654-500**Synonyms:** Sodium hydrogen sulfite.**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7631-90-5	Sodium bisulfite	99+	231-548-0

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white crystalline powder.

**Warning!** Harmful if swallowed. Contact with acids liberates toxic gas.**Target Organs:** Respiratory system.**Potential Health Effects****Eye:** May cause eye irritation.**Skin:** May cause skin irritation. May be harmful if absorbed through the skin. May cause sensitization by skin contact.**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract. Sulfite compounds may cause a severe allergic reaction in sensitive individuals and some asthmatics.**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled. May cause respiratory sensitization.**Chronic:** Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 2

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Keep away from strong acids. Do not store in aluminum containers.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash

facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium bisulfite	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	none listed

**OSHA Vacated PELs:** Sodium bisulfite: 5 mg/m<sup>3</sup> TWA

#### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** white

**Odor:** sulfurous odor

**pH:** 4 - 5 (25% aq. sol.)

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.

**Evaporation Rate:** Not applicable.

**Viscosity:** Not applicable.

**Boiling Point:** Not applicable.

**Freezing/Melting Point:** 150 deg C (decom)

**Decomposition Temperature:** Not available.

**Solubility:** 300 g/L

**Specific Gravity/Density:** 1.480

**Molecular Formula:** HNaO<sub>3</sub>S

**Molecular Weight:** 104.06

## Section 10 - Stability and Reactivity

**Chemical Stability:** Oxidizes when exposed to air. Contact with acid liberates gas. Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, dust generation, exposure to air, temperatures above 150°C, exposure to moist air or water.

**Incompatibilities with Other Materials:** Acids, oxidizing agents, aluminum.

**Hazardous Decomposition Products:** Oxides of sulfur, toxic fumes of sodium oxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7631-90-5: VZ2000000**LD50/LC50:**

CAS# 7631-90-5:

Oral, rat: LD50 = 2 gm/kg;

**Carcinogenicity:**

CAS# 7631-90-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Two cases of occupational asthma in laundry workers exposed to sodium metabisulfite were reported. Sodium metabisulfite may be considered to be the anhydride of sodium bisulfite and is the chief constituent of commercial dry sodium bisulfite.**Teratogenicity:** No information found**Reproductive Effects:** See actual entry in RTECS for complete information.**Mutagenicity:** See actual entry in RTECS for complete information.**Neurotoxicity:** No information found**Other Studies:**

Section 12 - Ecological Information
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**Ecotoxicity:** No data available. No information available.**Environmental:** No information available.**Physical:** No information available.**Other:** Do not empty into drains.

Section 13 - Disposal Considerations
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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.**RCRA U-Series:** None listed.

Section 14 - Transport Information
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	US DOT	Canada TDG
<b>Shipping Name:</b>	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O. (SODIUM BISULFITE)	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O. (SODIUM BISULFITE)
<b>Hazard Class:</b>	8	8
<b>UN Number:</b>	UN3260	UN3260
<b>Packing Group:</b>	III	III

Section 15 - Regulatory Information
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## US FEDERAL

### TSCA

CAS# 7631-90-5 is listed on the TSCA inventory.

### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

### Section 12b

None of the chemicals are listed under TSCA Section 12b.

### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

### CERCLA Hazardous Substances and corresponding RQs

CAS# 7631-90-5: 5000 lb final RQ; 2270 kg final RQ

### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

### SARA Codes

CAS # 7631-90-5: immediate.

**Section 313** No chemicals are reportable under Section 313.

### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

### Clean Water Act:

CAS# 7631-90-5 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

### STATE

CAS# 7631-90-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

## European/International Regulations

### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

XN

#### Risk Phrases:

R 22 Harmful if swallowed.

R 31 Contact with acids liberates toxic gas.

#### Safety Phrases:

S 25 Avoid contact with eyes.

S 46 If swallowed, seek medical advice immediately and show this container or label.

### WGK (Water Danger/Protection)

CAS# 7631-90-5: 1

**Canada - DSL/NDSL**

CAS# 7631-90-5 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 7631-90-5 is listed on the Canadian Ingredient Disclosure List.

<h2>Section 16 - Additional Information</h2>
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**MSDS Creation Date:** 9/02/1997

**Revision #9 Date:** 9/16/2008

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