

# SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards

**Northstar** Chemical

Northstar Chemical, Inc.

## Sodium Bisulfite, Solution (10 - 40%)

SDS No: 910-940

Revision Date: 1-27-15

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME (AS LABELED): Sodium Bisulfite Solution (10 - 40%)

CHEMICAL NAME/CLASS: Sodium Bisulfite Solution,  
Sodium Hydrogen Sulfite Solution

PRODUCT USE: Food and pharmaceutical preservative, waste water dechlorination agent, laboratory reagent, reducing agent, dietary supplement, and color preservative

SUPPLIER/MANUFACTURER'S NAME: Northstar Chemical, Inc.  
ADDRESS: Corporate Office  
14200 S.W. Tualatin-Sherwood Rd.  
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DATE OF PREPARATION: January 27, 2015

Si usted no entiende las Hojas de Informacion de Seguridad sobre Materials, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the Safety Data Sheet, find someone to explain it to you in detail.)

### 2. HAZARD IDENTIFICATION

#### Emergency Overview

**Target Organs:** Respiratory system, eyes, skin  
**GHS Classification:** Acute Toxicity, Oral (Category 4)  
Acute Toxicity, Dermal (Category 5)  
Serious Eye Irritant (Category 2A)

THIS MATERIAL IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

#### LABEL ELEMENTS:

**Signal Word:** Warning



Corrosive



Irritant

**Hazard Statements:** H302 – Harmful if swallowed

H313 – May be harmful to skin

H319 – Causes serious eye irritation

**Precautionary** P280 – Wear protective equipment for hands, eyes, face and respiratory tract

**Statements:** P305, P351 and P338 – IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and continue rinsing.

**Other Hazards:** Contact with acids liberates toxic sulfur dioxide gas.

**HMIS Classification:** Health Hazard 2

Flammability 0

Physical 0

**NFPA Rating:** Health Hazard 2

Fire 0

Reactivity 0

**Potential Health** Inhalation: Irritant to respiratory tract

**Effects:** Eye: Irritant

**Skin:** Irritant

**Ingestion:** Harmful if swallowed

**Aggravated Medical Condition:** Capable of provoking bronchospasm in sulfite sensitive individuals with asthma.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number	Concentration
Water	7732-18-5	60-90 %
Sodium bisulfite	7631-90-5	40-10 %
Sodium Sulfite	7757-83-7	< 1%
Sodium Sulfate	7757-82-6	< 1%

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### 4. FIRST-AID MEASURES

<b>Exposure Route Symptom Treatment Inhalation:</b>	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.
<b>Eye Contact:</b>	Irritation to eyes and mucous membranes.	Irrigate with water until no evidence of chemical remains. Obtain medical attention.
<b>Skin Contact:</b>	Irritation, itching, dermatitis	Wash with soap and drench with water. Remove contaminated clothing and wash before reuse.
<b>Ingestion:</b>	Irritation to mucous membranes.	Give large quantities of water or milk immediately. Obtain medical attention.

**Seek appropriate medical attention and provide this SDS to attending doctor**

**Note to physician: Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.**

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## 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 Product:** May release hazardous gas.

**Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways.

**Fire-Fighting Equipment:** 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.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill / Leak Procedures:** Wear appropriate PPE - See Section 8.

**Small Spills / Leaks:** Spills can be neutralized with an alkaline material such as caustic soda. 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.

**Containment:** For large spills, dike far ahead of contaminated runoff for later disposal.

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## 7. HANDLING and STORAGE

**Handling Precautions:**

Avoid contact with product. Do not breathe dust or vapor.

**Storage Requirements:**

Store in areas, away from heat and moisture and protect from *physical* damage. Segregate from acids and oxidizers.

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## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

**Component:** Sodium Bisulfite **CAS Number:** 007631-90-5

**ACGIH (TLV) TWA:** 5 mg/m<sup>3</sup>

**OSHA (PEL) TWA:** 5 mg/m<sup>3</sup>

**NIOSH (REL) TWA:** 5 mg/m<sup>3</sup>

**IDLH** – None established

**IDLH** - Immediately Dangerous to Life or Health

**PEL** – Permissible Exposure Limit

**REL** – Recommended Exposure Limit

**TLV** – Threshold Limit Value

**ACGIH** – American Conference of Governmental Industrial Hygienists

**TWA** – Time Weighted Average based on 8 hour exposure days and a 40 hour week.

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

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## 9. PHYSICAL and CHEMICAL PROPERTIES

**Physical State:** Liquid **Water Solubility:** NA  
**Appearance:** Yellow **Other Solubility:** NA  
**Odor Threshold:** Pungent SO<sub>2</sub> odor **Boiling Point:** 205 oF  
**Vapor Pressure:** NA **Freezing Point:** 26 oF  
**Vapor Density (Air=1):** NA **Melting Point:**  
**Formula Weight:** 105 **Evaporation Rate:** Normal.  
**Density:** NA **pH:** 3.3 – 4.0  
**Specific Gravity (H<sub>2</sub>O=1):** 1.3 - 1.4 % **Volatile:** NA

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## 10. STABILITY and REACTIVITY

**Stability:** Stable under normal conditions.

**Polymerization:** Hazardous polymerization will not occur.

**Chemical Incompatibilities:** Sodium Bisulfite Solutions may 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 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** May release hazardous sulfur dioxide gas

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## 11. TOXICOLOGICAL INFORMATION

**Eye Effects (rabbit):** Not available. **Acute Inhalation Effects (rat):** Not available.

**Skin Effects (rabbit):** Not available. **Acute Oral Effects (rat):** LD<sub>50</sub> = 2,000 mg/kg

**Carcinogenicity:** IARC, NTP, and OSHA do not list Sodium Bisulfite 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 bronchioconstriction and reduced levels in forced expiratory volume. Decomposition of sodium bisulfite solutions may release toxic and hazardous fumes of sulfur oxides, including sulfur dioxide, which may cause permanent pulmonary impairments from acute and chronic exposure. The Immediately Dangerous to Life or Health (IDLH) level for SO<sub>2</sub> is 100 ppm.

**Aquatic Toxicity:** The toxicity threshold of Sodium Bisulfite (100 hr. at 23 degrees Celsius) to Daphnia Magna has been reported to be 102 mg/l. In the presence of additional sodium salts, this threshold may be lower. For minnows, exposed for 6 hours to sodium bisulfite solution in distilled water at 19 degrees Celsius it was 60-65 mg/l, and in hard water at 18 degrees Celsius it was 80-85 mg/l.

The 24, 48, and 96 hour LC<sub>50</sub> value was 240 mg/l for the mosquito-fish (*Gambusia affinis* in turbid water at 17 - 22 degree Celsius.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Sodium Bisulfite is a non hazardous solution 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.

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### 13. DISPOSAL CONSIDERATIONS

**Disposal:** Waste determinations typically consider Sodium Bisulfite 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.

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### 14. TRANSPORTATION INFORMATION

This material is hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation.

**Shipping Name:** Bisulfites, aqueous solutions, n.o.s. **Technical Name:** Sodium Bisulfite

**Shipping Symbols:** Corrosive

**Hazard Class:** 8 - Corrosive

**Subsidiary Hazard:** NA

**ID No. (Placard):** UN2693

**Packing Group:** III

**Label:** Required

**Reputable Quantity:** (RQ) 5,000 Lbs

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### 15. REGULATORY INFORMATION

**EPA Regulations:**

RCRA Hazardous Waste Classification (40 CFR 261): Not listed. RCRA Hazardous Waste Number (40 CFR 261): Not listed. CERCLA Hazardous Substance (40 CFR 302.4): Listed. CERCLA Reportable Quantity (RQ): 5000 pounds

SARA Title III: Not listed.

FIFRA: Not regulated.

TSCA: Inventory listed chemical; PAIR Reportable; Not listed in Toxic Substances Chemical Index

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### 16. OTHER INFORMATION

The information herein is believed to be reliable. However, no warranty, expressed or implied, is made as to its accuracy or completeness and none is made as to the fitness of this material for any purpose. The manufacturer shall not be liable for damages to person or property resulting from its use. Nothing herein shall be construed as a recommendation for use in violation of any patent.