



Holland Company

LIQUID SODIUM BISULFITE

Safety Data Sheet

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product/Chemical Name: Liquid Sodium Bisulfite

Chemical Family: Bisulfites Aqueous

General use: Water treatment and manufacturing applications

Company Information:

Holland Company, Inc.

153 Howland Avenue

Adams, MA 01220 U.S.A.

Phone: 413-743-1292 FAX: 413-743-1298

Emergency Phone:

1-800-424-9300 Chemtrac (USA)

1-613-996-6666 or Cell *666 CANTUTEC (Canada)

SECTION 2. HAZARDS IDENTIFICATION



WARNING

IRRITANT AVOID CONTACT



WARNING

MAY BE CORROSIVE TO SOME METALS

Hazard Statements

Irritating to eyes. Category 2

Fumes may be irritating to respiratory system. Category 3

May be irritating to skin. Category 2

May be harmful if ingested. Category 4

May be corrosive to some metals. Category 1

Precautionary Statements

Avoid direct contact.

Use protective equipment if contact is possible.

Wash hands thoroughly after contact.



SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance: Bisulfite sodium salt

Product name: Liquid Sodium Bisulfite

CAS #: 7631-90-5

Impurities: NA

SECTION 4. FIRST AID MEASURES

Inhalation of mist or liquid:

Remove from continued exposure. Allergic reaction in some individuals may occur.

Get immediate medical attention if difficulty with breathing or uncontrolled coughing occurs.

Skin contact:

Remove contaminated clothing - footwear and wash skin with water.

If irritation or inflammation develops get medical attention.

Eye contact:

Immediately rinse eyes with water for an extended period.

Get medical attention.

Ingestion:

Spontaneous vomiting may occur.

Do not actively induce vomiting.

Rinse mouth and drink water.

Get medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Flammability:

Product is not flammable.

Controls:

Use water to keep containers cool.

If possible move portable containers from areas under fire threat.

Hazards:

In a fire product can decompose resulting in the formation of irritating and potentially toxic sulfur oxide fumes. Exposure to products of decomposition during a fire may be hazardous to health.

Special equipment:

In case of possible exposure to products of decomposition use appropriate self-contained or other approved respiratory protection. Consult engineers if necessary.

Mechanical impact:

Not sensitive.

Static discharge:

Not sensitive.



SECTION 6. ACCIDENTIAL RELEASE MEASURES

General: Site specific procedures to address accidental spills are necessary as dictated by facility design, location, staffing, containment structures, and regulatory requirements. Consult engineers if needed.

Personal protection: In the event of a spill clear unnecessary staff from spill area.

If direct contact with spilled material, fumes or mist is likely use appropriate protective equipment.

Spills: Maintain adequate ventilation. Manage spill using containment structures or inert materials and collect for reuse. Product not reused can be neutralized using a mild caustic such as soda ash or calcium carbonate (agricultural lime). Material can be captured using inert absorbent materials for disposal in accordance with local, state, province, and federal regulations. Consult engineers if needed.

Caution: For people with sulfite sensitivity product fumes may provoke bronchospasm. Spills may result in the creation of a breathing hazard. Take steps to provide appropriate respiratory protection and maintain adequate ventilation. Consult engineers if needed.

SECTION 7. HANDLING AND STORAGE

Incompatible Chemicals: Acids, oxidizers

Containment: To minimize the possibility of a release into the environment and contact with other incompatible chemicals, storage tanks and containers should have a dedicated liquid tight secondary containment system with adequate ventilation. Consult engineers if needed.

General hygiene: Do not eat, drink, take medication or smoke when direct contact is possible.

Always thoroughly wash hands after leaving a work area where contact is possible or has occurred.

Storage: Vent storage tanks away from work areas. Clean storage tanks on a regular schedule based on inspection and experience. Have storage tanks, containers, and transfer systems properly labeled for contents. Have procedures for determining product quantity in storage tanks and for accepting deliveries. Use tanks, transfer lines, pumps valves and process instrumentation designed for this material using approved materials of construction. Some materials commonly used are FRP, plastic, Teflon®, and Stainless steel. Over time some common metals such as steel, iron, copper and aluminum will experience corrosion and their use should be avoided. Consult with engineer if necessary.

Temperature for storage: Preferred temperature range is 16 -29C (60F-85F).

Ventilation: Provide adequate ventilation. Consult engineers in needed.

Personal protection: Avoid direct contact. Avoid breathing fumes or mist. Sulfite sensitive and asthmatic individuals should avoid all contact with product.

Use appropriate skin and eye protective equipment and as conditions warrant appropriate respiratory protective equipment. Consult engineer if needed.



SECTION 8. EXPOSURE CONTROL / PERSONNAL PROTECTION

Exposure Limits

Ingredient: Sodium Bisulfite CAS # 7631-90-5

OSHA PEL (vacated) TWA: 5mg/m ³	ACGIH TLV TWA: 5 mg/m ³	NIOSH IDLH TWA: 5 mg/m ³
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Respiratory - Ventilation: For asthmatics and people with sulfite sensitivity product fumes may provoke bronchospasm. Ensure adequate ventilation at all times. Under normal conditions respiratory protective equipment is not needed. If work requires direct exposure to product fumes or mist use appropriate, approved respiratory protection. Consult engineers if necessary.

Eye wash: Have an appropriate eye wash bottle, fountain, or safety shower available in the work area.

Eyes: Use protective eye glasses-goggles and face shield protection to prevent direct contact.

Skin: Use impervious gloves and foot covering. Wear long sleeve shirts and full length trousers.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid clear to slight haze, amber to colorless.

Flammability: Not flammable.

Upper/lower flammability limits: NA

Auto ignition: NA

Flash point: NA

Odor: Pungent, sulfurous.

Vapor density: 78 mm Hg

pH: 3.0 - 5.0 @ 25C (77F)

Density: 1.30-1.37 S.G. @ 21C (70F)

Freeze point: 7C (45F) + -

Boiling point-range: 104C (220F) + -

Water Solubility: Miscible in water

Evaporation rate: No information

Partial coefficient: n-octanol/water: No information

Decomposition temperature: No information

Viscosity: 3-4 centipoise/mPa.s @ 23C (73F)

VOC: No information



SECTION 10. STABILITY AND REACTIVITY

Chemical stability:

Product is chemically stable under recommended storage conditions.

Conditions to avoid:

Elevated temperature.

Materials to avoid:

Acids, oxidizers

Decomposition products:

Thermal decomposition of dried product can release irritating and toxic fumes.

SECTION 11. TOXICOLOGY INFORMATION

Toxicity:

Oral (ingestion) estimate: liquid sodium bisulfite LD50 Rat 2,000mg/kg

Inhalation: No information

Dermal estimate: No information

Effects of exposure: No information

Skin: Repeated contact may irritate and inflame skin.

Eyes: Will cause irritation.

Respiratory: Inhalation of fumes may cause bronchial irritation and coughing.

Mucous membranes: May cause irritation.

Ingestion: Can cause vomiting, pain and discomfort to mouth, throat, and stomach.

Sensitization: No information.

Carcinogenicity: NTP Not listed. IARC Not listed. OSHA Not listed.

Reproductive Toxicity, Mutagenic or teratogenic effects:

No known reproductive toxicity, mutagenic or teratogenic effects in animal experiments are known.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic toxicity:

High concentrations in water can contribute to a temporary reduction of oxygen levels in aquatic environments.

Acute LC50 (liquid sodium bisulfite): 240ppm Fish 96 hours (oxygen scavenger)

Toxicity to other organisms: No information

Bioaccumulation potential: No information

Octanol-water coefficient: No information

Biodegradability: Rapid biological decomposition is to be expected.

Chemical degradability: No information

Mobility in Soil: No information



SECTION 13. DISPOSAL CONSIDERATIONS

RCRA Hazardous waste: Not listed.

Unused product that has not been neutralized may be a Characteristic waste (D002).

Consult engineers if necessary.

Neutralization:

Product can be neutralized using a mild alkali such as soda ash or agricultural lime. Take steps to provide adequate ventilation whenever handling. Neutralized residue can be swept up or rinsed down with water and captured using absorbent materials for reuse or disposal in accordance with local, state, province, and federal regulations. Consult engineers if necessary.

Special precautions: None known

Container reuse:

Packaging and storage containers must be disposed of in accordance with local, state, province, and federal regulations. Consult engineers if necessary.

SECTION 14. TRANSPORTATION INFORMATION

Land (DOT), Sea (IMDG), Air (ICAO/IATA)

UN number: UN2693

Shipping name: Bisulfites, Aqueous N.O.S. (Liquid sodium bisulfite)

Hazard class: 8

Packing group: III

Environmental hazards: Not a marine pollutant

Special precautions: None known

SECTION 15. REGULATORY INFORMATION

RCRA Hazardous waste: Not Listed. Unused, un-neutralized product may be a Characteristic Waste (D002). Consult engineers if necessary.

CERCLA Hazardous substance: Listed

CERCLA Reportable Quantity (RQ): 5,000lbs dry basis, approx. 1,200 gallons liquid 38% SBS.

SARA 311/312 Categories:

Acute (immediate) health effects: Yes

Chronic (delayed) health effects: No

Sudden release of pressure hazard: No

Reactivity hazard: No

SARA 313 Toxic Chemical listing: Not listed

SARA Extremely hazardous substance (EHS): Not listed

OSHA Air (29CFR 1910.10000, table Z-1, Z-1A): Not listed

OSHA Special Regulated Substance (29CFR 1910): Not listed

California prop 65 chemical: No

WHMIS: E corrosive

United States TSCA Section Inventory Status: Product exempt or listed on the TSCA Inventory.

Canada CEPA / Canadian Domestic Substances List (DSL): Components are included on the Domestic Substance List (DSL) or are not required to be listed.

Inventories: Chinese, Korean (ECL), Philippines (PICCS), Japanese (ENCS), European (EINECS), NZ.



Liquid Sodium Bisulfite

SECTION 16. OTHER INFORMATION

NSF/ANSI 60 Drinking Water Treatment Chemicals:

Maximum use 60mg/L

Preparatory statement:

The information in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information we have available, and belief as of the publication date. The information is designed solely as guidance for handling, storage, transportation, release, and disposal and is not to be considered a warranty or quality specification.

Date Sources for the SDS:

Literature, databases, practice, manufacturing experience, publications, own tests, regulations

Revision:

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