



SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER: Sodium Bisulfite

OTHER IDENTIFIERS: N/A

DISTRIBUTED BY: Chemstream, Inc.
166 Commerce Drive
Stoystown, PA 15563

PHONE NUMBERS: Business – (814) 629-7118 (business hours)
CHEMTREC - (800) 424-9300 (transportation emergencies)



SECTION 2 - HAZARDS IDENTIFICATION

Hazard Statements
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Signal word
Warning

Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Pictograms of Hazards



SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>%</u>
Water	7732-18-5	58-73
Sodium Bisulfite	7631-90-5	27-42

SECTION 4 - FIRST AID MEASURES

4.1 GENERAL ADVICE:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

4.2 EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

4.3 SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

4.4 INHALATION:

After high vapor exposure, remove to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

4.5 SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

4.6 NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation). Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 FIRE & EXPLOSION PREVENTIVE MEASURES

Isolate from oxidizers, acids, and extreme heat.

5.2 EXTINGUISHING MEDIA

Use appropriate extinguishing media for surrounding fire.

5.3 SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

5.4 UNUSUAL EXPLOSION AND FIRE PROCEDURES

Noncombustible. Thermal decomposition produces toxic fumes. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

6.2 PERSONAL PROTECTIVE EQUIPMENT

The proper personal protective equipment for incidental releases (such as: 1 Liter of the

product released in a well-ventilated area), use impermeable gloves (triple-gloves (rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

6.3 ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

6.4 CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

SECTION 7 - HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Isolate from oxidizers, heat, & open flame. Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Avoid contact with skin & eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. Empty container very hazardous! Continue all label precautions!

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Isolate from acids, strong oxidants. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.

7.3 NONBULK: CONTAINERS:

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

7.4 BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

7.5 TANK CAR SHIPMENTS:

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

7.6 PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is

provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

7.7 EMPTY CONTAINER WARNING:

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.**

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Water	7732-18-5	231-791-2	None Known	None Known
Sodium Bisulfite	7631-90-5	-	None Known	None Known

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS: Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne

exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations.

For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn.

If oil particles (such as: lubricants, cutting fluids, glycerine, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS

Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxilliary positive pressure Self-Contained Breathing Apparatus.

VENTILATION

LOCAL EXHAUST: Necessary **MECHANICAL (GENERAL):** Necessary

SPECIAL: None **OTHER:** None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION:

Use gloves chemically resistant to this material. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitril") or ("NBR"),

Polyvinyl chloride ("PVC") or "vinyl"), Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

WORK & HYGIENIC PRACTICES:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at end of each shift & before eating, smoking or using the toilet. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid, Straw Yellow

ODOR: Sharp, Pungent

ODOR THRESHOLD: Not Available

pH (Neutrality): 4.1 - 4.6

BOILING RANGE (IBP,50%,Dry Point): > 100 C / > 212 F

FLASH POINT (TEST METHOD): Not Applicable

EVAPORATION RATE (n-BUTYL ACETATE=1): Not Applicable

FLAMMABILITY CLASSIFICATION: Non-Combustible

LOWER FLAMMABLE LIMIT IN AIR (% by vol): Not Applicable

UPPER FLAMMABLE LIMIT IN AIR (% by vol): Not Available

VAPOR PRESSURE (mm of Hg)@20 C 9

VAPOR DENSITY (air=1): 0.670

GRAVITY @ 68/68 F / 20/20 C:

SPECIFIC GRAVITY (Water=1): 1.320

POUNDS/GALLON: 10.996

WATER SOLUBILITY: Complete

PARTITION COEFFICIENT (n-Octane/Water): Not Available

AUTO IGNITION TEMPERATURE: Not Applicable

DECOMPOSITION TEMPERATURE: Not Available

VOCs (>0.044 Lbs/Sq In) : 0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal

TOTAL VOC'S (TVOC)*: 0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal

NONEXEMPT VOC'S (CVOC)*: 0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal

HAZARDOUS AIR POLLUTANTS (HAPS): 0.0 Wt% /0.0 g/L / 0.000 Lbs/Gal

NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) 0.0

* Using California Air Resources Board (CARB) Rule 310.

SECTION 10 - STABILITY AND REACTIVITY

10.1 STABILITY

Stable under normal conditions.

10.2 CONDITIONS TO AVOID

Gradually oxidizes to sodium sulfate on exposure to air. Temperatures at or near boiling point causes evolution of toxic and corrosive sulfur dioxide.

10.3 MATERIALS TO AVOID

Mineral acids, oxidizing agents. Contact with acid liberates irritating sulfur dioxide gas. Corrosive to steel, carbon steel, and other common materials of construction at ambient temperatures.

10.4 HAZARDOUS DECOMPOSITION PRODUCTS

Sodium Oxide & Hydroxide, Sulfur Dioxide from heating.

10.5 HAZARDOUS POLYMERIZATION

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

11.11 EYE & SKIN CONTACT:

CORROSIVE! Causes severe skin burns. Causes severe eye damage. Wash thoroughly after handling.

11.12 INHALATION:

Mist irritating to respiratory tract.

11.13 SWALLOWING:

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED

None Known.

11.3 CHRONIC HAZARDS

11.31 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

11.32 IRRITANCY OF PRODUCT: This product is irritating to contaminated tissue.

11.33 SENSITIZATION TO THE PRODUCT: No component of this product is known to be a sensitizer.

11.34 MUTAGENICITY: This product is not reported to produce mutagenic effects in humans.

11.35 EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.

11/36 TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.

11.37REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans. A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (such as: within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

MAMMALIAN TOXICITY INFORMATION

LD50 (Oral): 820 mg/kg (Mouse)

SECTION 12 - ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released

into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:

No aquatic environmental information is available on this product.

12.4 MOBILITY IN SOIL

Mobility of this material has not been determined.

12.5 DEGRADABILITY

This product is completely biodegradable.

12.6 ACCUMULATION

Bioaccumulation of this product has not been determined.

SECTION 13 - DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled.

Incineration or landfill should only be considered when recycling is not feasible.

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies. Deactivating Chemicals: Soda Ash, Lime or Limestone. EPA Waste Number: D002.

SECTION 14 - TRANSPORT INFORMATION

DOT/TDG SHIP NAME: UN2693, Bisulfites, aqueous solutions, n.o.s.(contains: Sodium Bisulfite), 8, PG-III

DRUM LABEL: Corrosive (8)IATA / ICAO: UN2693, Bisulfites, aqueous solutions, n.o.s.(contains: Sodium Bisulfite), 8, PG-III

IMO / IMDG: UN2693, Bisulfites, aqueous solutions, n.o.s.(contains: Sodium Bisulfite), 8, PG-III

EMERGENCY RESPONSE GUIDEBOOK NUMBER: 154

SECTION 15 - REGULATORY INFORMATION

15.1 EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Chronic Health, Reactivity

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

EPA CLEAN WATER ACT

Sodium Bisulfite is listed as a hazardous substance which, if discharged to the water, may require immediate response to mitigate dangers to human health and the environment.

SARA TITLE III

INGREDIENTS	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
Sodium Bisulfite	7631-90-5	-	27-42	(311,312)	5000

15.2 STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):

This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

15.3 INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical inventories of the following countries: Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS)G, Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes.

E: Corrosive

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

SECTION 16 - OTHER INFORMATION

16.1 HAZARD RATINGS:

HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 0, PHYSICAL HAZARD: 0

(Personal Protection Rating to be supplied by user based on use conditions.)

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

PREPARATION DATE: December 12, 2016

SUPERCEDES: New SDS

REASON FOR REVISION: N/A

The product information contained herein is believed to be accurate as of the date of the Safety Data Sheet, and is provided without warranty, expressed or implied, as to the results of use of this information or the product to which it relates. Recipient assumes all responsibility for the use of this information and the use (alone or in combination with any other product), storage or disposal of the product, including any resultant personal injury or property damage.
