

MATERIAL SAFETY DATA SHEET
PRODUCT: SODIUM BISULFITE SOLUTION

SECTION 1 - MANUFACTURER INFORMATION

MANUFACTURER/DISTRIBUTOR:

PVS CHEMICAL SOLUTIONS, INC.
55 Lee Street
Buffalo, New York 14210
(716) 825-5762 (for product information)
(716) 825-6454 (fax)

Distributed By:
SAL Chemical
3036 Birch Drive
Weirton, WV 26062
304-748-8200

FOR TRANSPORTATION EMERGENCY ONLY - DAY OR NIGHT
CALL CHEMTREC, 1-800-424-9300

PREPARATION/REVISION DATE: 12/15/09
CONTACT: EHS&S Manager

SECTION 2 -- PRODUCT IDENTITY/HAZARDOUS INGREDIENTS INFORMATION

Product name: Sodium Bisulfite Solution
Chemical name/synonyms: Sodium Bisulfite, Aqueous Solution; Sodium Acid Sulfite;
Sodium Hydrogen Sulfite
Chemical formula: NaHSO₃
CAS number: 7631-90-5
Product Code: N/A

HAZARDOUS INGREDIENTS: Yes

<u>Component</u>	<u>CAS No.</u>	<u>% by wt.</u>
Sodium Bisulfite	7631-90-5	27-42%
Exposure limits:	ACGIH TLV:	5 mg/m ³ , 8-hr TWA
	OSHA PEL:	None
	IDLH	None

NON-HAZARDOUS INGREDIENTS: Yes

<u>Component</u>	<u>CAS No.</u>	<u>% by wt.</u>
Water	7732-18-5	Balance

OSHA 29 CFR 1910.1200 EVALUATION: Hazardous

SECTION 3 -- PHYSICAL/CHEMICAL CHARACTERISTICS

APPEARANCE AND ODOR:	Clear, yellow liquid with an odor of sulfur dioxide.
BOILING POINT:	>100 °C
MELTING POINT:	no information
VAPOR PRESSURE (REID):	78 mm Hg @ 37.7 °C
VAPOR DENSITY (AIR = 1):	no information
SPECIFIC GRAVITY (WATER = 1):	1.26 to 1.37 @ 25 °C
PERCENT VOLATILE BY VOL@ 55 °C:	no information
EVAPORATION RATE (BUTYL ACETATE = 1):	<1
pH:	3 to 5
SOLUBILITY IN WATER:	Complete

SECTION 4 -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP METHOD): N/A
FLAMMABLE LIMITS IN AIR, % BY VOLUME: N/A LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA: Use water, foam, dry chemical, or CO₂ fire extinguishers as appropriate to fight surrounding fires. Do not allow water run-off to enter sewers or watercourses.

SPECIAL FIRE FIGHTING PROCEDURES: Wear protective clothing and protective equipment as appropriate for surrounding fire. Keep storage tanks or containers cool. Flood with water. Wear self contained breathing apparatus for major exposure when release of SO₂ gas is possible.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Releases sulfur dioxide gas when heated.

SECTION 5 -- REACTIVITY DATA

STABILITY: Stable

HAZARDOUS POLYMERIZATION: will not occur

INCOMPATIBILITY (CONDITIONS AND MATERIALS TO AVOID): Material is stable when properly handled. Reacts with acids, oxidizing agents, and with heat to form toxic sulfur dioxide (SO₂) gas. Avoid sources of heat.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposes with heat or oxidizing agents to release toxic SO₂ gas.

SECTION 6 -- HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation, ingestion, direct contact

HEALTH EFFECTS (ACUTE AND CHRONIC):

GENERAL: A skin, eye and mucous membrane irritant. Only moderately toxic by ingestion but may cause a severe allergic reaction in some asthmatics and others who are hypersensitive to sulfites. Hazards are largely those from acute exposure or direct contact rather than chronic or repeated low level exposure. The potential for exposure to sulfur dioxide must always be considered as well, particularly when the solution may become overheated.

INHALATION: Inhalation will irritate and may damage upper respiratory tract and lungs.

INGESTION: May irritate gastrointestinal tract. Concentrated solutions may cause burns to the digestive tract.

DIRECT CONTACT: Direct skin contact with the solution will cause slight to moderate skin irritation with discomfort, rash and, rarely, an allergic reaction.

EYE CONTACT: Exposure to mists or aerosols of this solution will cause eye irritation with possible discomfort, tearing, or blurring of vision. If left untreated the solution may cause burns and some eye tissue damage.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May cause a severe allergic reaction in some asthmatics and others who are hypersensitive to sulfites.

CARCINOGENS (NTP, IARC, OR OSHA): No

SECTION 7 -- FIRST AID

INHALATION: Remove victim to fresh air. If not breathing, perform artificial respiration and get medical attention.

INGESTION: Drink copious quantities of water or milk. Do not induce vomiting. Get immediate medical attention.

DIRECT CONTACT: Wipe off excess. Flush immediately with water for at least 15 minutes while removing contaminated clothing. Get immediate medical attention. Wash clothing before re-use. Destroy contaminated shoes.

DIRECT EYE CONTACT: Flush immediately with water for at least 15 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye/lid tissue. Get immediate medical attention.

SECTION 8 -- PRECAUTIONS FOR SAFE STORAGE, HANDLING AND USE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep storage tanks and containers out of the sun and away from sources of heat and ignition to prevent decomposition and release of SO₂ gas. Containers should be kept tightly closed to prevent oxidation of the product. In cold weather, store product at temperatures above

50 °F to avoid crystallization. Do not strike containers or fittings with tools or hard objects. Emptied container retains vapor and product residue.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain spill in order to prevent contamination of sewage system or waterway. If possible, neutralize on a dry basis with sodium carbonate or sodium bicarbonate; then flush with water in accordance with applicable regulations.

WASTE DISPOSAL METHODS: Dispose of spilled, neutralized, or waste product, contaminated soil and other contaminated materials in licensed landfill or treatment facility in accordance with all local, state and federal regulations.

SECTION 9 -- EXPOSURE CONTROL INFORMATION

VENTILATION: Provide ventilation to control exposure levels below airborne exposure limits. Use local exhaust ventilation. Reference NFPA Standard 91 for design of exhaust systems.

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved, full-face respirator with canister approved for sulfuric acid/sulfur trioxide vapor and mist. Consult respirator manufacturer to determine appropriate equipment. If concentrations are high or unknown, use self-contained breathing apparatus.

PROTECTIVE GLOVES: Wear impervious rubber gloves.

EYE PROTECTION: Wear splash proof chemical safety goggles. Eyewash fountains recommended in all storage and handling areas. Do not wear contact lenses.

OTHER PROTECTIVE EQUIPMENT: Wear protective clothing to prevent skin contact. Full face shield and rubber footwear should be used. Acid resistant hood and full body suit recommended. Safety shower recommended in all storage and handling areas.

WORK/HYGIENIC PRACTICES: Avoid breathing mist. Use gloves when handling.

OTHER PRECAUTIONS: None

SECTION 10 -- REGULATORY INFORMATION

USDOT & TRANSPORT CANADA:

Proper shipping name: Bisulfites, aqueous solutions, n.o.s. (sodium bisulfite solution)

Hazard Class: 8

Identification Number: UN2693

Packing Group: PGIII

Marine Pollutant: No

IMO Classification: Class 8

SARA TITLE III 311/312 HAZARD CLASSIFICATIONS:

ACUTE: Yes
CHRONIC: No
FIRE: No
REACTIVITY: No
PRESSURE: No

SARA TITLE III 313 HAZARD CLASSIFICATIONS:

This product does not contain any toxic chemicals subject to the Toxic Release reporting requirements.

OTHER RATINGS: (hazard index key: 4=severe, 3=serious, 2=moderate, 1=slight, 0=minimal)
HMIS: Health=1, Flammability=0, Reactivity=1, CORROSIVE (COR)
NFPA: Health=1, Flammability=0, Reactivity=1

OTHER INFORMATION:

CERCLA HAZARDOUS SUBSTANCE: YES, RQ=5000 lbs.
RCRA 261.33: No
TSCA 8(d): Reported/Included
AQUATIC TOXICITY: Corrosive 96 hr LC50 (mosquito/fish) = 240 ppm. This solution is mildly acidic and has a high chemical oxygen demand (COD). Either the solution itself or water run-off from the material could pose a threat to nearby watercourses.
WHMIS: Class E – Corrosive Material
CANADA DSL: Yes
CALIFORNIA PROP. 65: Not Listed