



SODIUM MITABISULPHITE

PRODUCT INFORMATION

CHEMICAL NAME: Sodium metabisulphite
SYNONYM(S): Sodium metabisulfite, anhydrous sodium bisulfite, ABS, pyrosulfite.
CHEMICAL FAMILY: Sulphites MOLECULAR FORMULA: Na₂S₂O₅
SHIPPING NAME: Sodium metabisulphite
WHMIS: D.2B
PRODUCT USE: Antioxidant. Bleaching and disinfectant agent in textile, laundering, paper and fermentation industries.
MANUFACTURER: General Chemical EMERGENCY PHONE: (519)736-2111
SUPPLIER: Panther Industries Inc. Box 628 Davidson, Sask. S0G 1A0
EMERGENCY TELEPHONE NUMBER: (306) 567-2814

HAZARDOUS INGREDIENTS

INGREDIENTS:	WEIGHT %	C.A.S. REGISTRY #
Sodium Metabisulphite	99	7681-57-4

PHYSICAL DATA

PHYSICAL STATE: Solid
ODOUR AND APPEARANCE: Fine, white granular. Pungent sulphur dioxide odour.
ODOUR THRESHOLD: Pungent sulphur dioxide odour.
VAPOUR PRESSURE: Not applicable. VAPOUR DENSITY: Not applicable.
EVAPORATION RATE: Not applicable. pH: 1% solution = 4.3(approx.)
BOILING POINT: Decomposes above 150oC MOLECULAR WEIGHT: 190.11
MELTING POINT: Not applicable BULK DENSITY: Not available.
SOLUBILITY IN WATER: 36% at 16oC (by weight)
% VOLATILE BY VOLUME: Not applicable. SPECIFIC GRAVITY: 1.48
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available.

FIRE AND EXPLOSION DATA

CONDITIONS OF FLAMMABILITY: Decomposition product sodium sulphide is a dangerous fire risk.
MEANS OF EXTINGUISHING: Use fire extinguishing agents suitable to material on fire.
FLASH POINT: Not applicable. UPPER FLAMMABLE LIMIT: Not applicable.
LOWER FLAMMABLE LIMIT: Not applicable.
AUTO IGNITION TEMPERATURE: Not applicable.
HAZARDOUS COMBUSTION PRODUCTS: When decomposed sodium sulphide residue is produced, which is a dangerous fire risk, a strong irritant to skin and tissue and incompatible with acids.
SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH approved self-contained breathing apparatus and full protective clothing including face and eye protection if this product is exposed to fire. Use fire fighting agents suitable to material on fire.
EXPLOSION HAZARDS: Not applicable.

REACTIVITY DATA

STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not occur.
INCOMPATIBILITY: Oxidizers may cause strong exothermic reaction. Acids, water and ice yield sulphur dioxide gas, which is toxic and corrosive and potentially deadly.
Water and/or ice increases the natural rate of yield of sulphur dioxide gas.



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HAZARDOUS REACTIONS/DECOMPOSITIONS:

Sulphur dioxide gas which is toxic and corrosive. See above comments. Sodium sulphide residue which is flammable, dangerous fire risk, a strong irritant to skin and tissue and incompatible with acids.

CONDITIONS TO AVOID: Temperatures above 150°C cause evolution of toxic and corrosive gas-sulphur dioxide.

HEALTH HAZARD DATA

INHALATION: Contact with acids, water and/or ice, releases sulphur dioxide gas which may be harmful or deadly if inhaled. May cause severe or deadly allergic reactions in some asthmatics and sulphite sensitive individuals. Inhalation of dust or mist can irritate the respiratory tract. Possible signs and symptoms of allergic reaction include bronchoconstriction, sweating, flushing, hives, rapid heart rate, decreased blood pressure and anaphylaxis.

SKIN CONTACT: Repeat or prolonged contact with dust may cause irritation. Contact with solution will irritate.

EYE CONTACT: Dust or mist and solutions will irritate or burn eyes.

INGESTION: May irritate gastrointestinal tract. Very large doses cause death, violent colic, diarrhea, and depression. May cause severe or deadly allergic reaction in some asthmatics and sulphite sensitive individuals.

CHRONIC EXPOSURE EFFECTS: Medical conditions aggravated by exposure. May cause severe or deadly allergic reactions if inhaled or in some asthmatics and sensitive individuals.

EXPOSURE LIMITS: T.W.A.E.V. 5 mg/m³ **IRRITANCY:** Not available. **MUTAGENICITY:** Not available. **SENSITIZATION TO PRODUCT:** Not available.

CARCINOGENICITY: Not available. **REPRODUCTIVE TOXICITY:** Not available.

TOXICOLOGICALLY SYNERGISTIC MATERIALS: Not available.

TERATOGENICITY DATA: Not available.

ANIMAL TOXICITY DATA: LD50: 115 mg/kg (intravenous, rat)

FIRST AID MEASURES

INHALATION: Remove to fresh air. Get immediate medical attention if signs of suffocation, irritation or any other symptoms develop.

SKIN CONTACT: Promptly wash with plenty of soap and water. Remove contaminated clothing and wash before reuse.

EYE CONTACT: Immediately flush with plenty of water, for at least 15 minutes. Get medical attention.

INGESTION: If conscious, give plenty of water or milk. Induce vomiting by touching finger to back of throat. Get immediate medical attention. Never give anything by mouth to an unconscious person.

PREVENTATIVE MEASURES

RESPIRATORY PROTECTION: Where required, use a NIOSH approved respirator for dust, mist, and/or sulphur dioxide gas, as conditions indicate. Some exposure may require NIOSH approved self contained breathing apparatus or supplied-air respirator.

SKIN PROTECTION: For handling dry material, wear cotton gloves and full work clothing, including long-sleeved shirt and trousers. When handling solutions under prolonged or repeated contact, wear impervious gloves, clothing and boots.

EYE/FACE PROTECTION: Wear hard hat (or other head covering) and chemical safety goggles. Do not wear contact lenses.

SPECIAL HANDLING PROCEDURES:



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Avoid contact with eyes, skin, clothing. Avoid breathing dust or mist. Use good personal hygiene and housekeeping. Keep away from water, ice, acids, or heat.

STORAGE REQUIREMENTS:

Cool, dry, well-ventilated, away from water, ice, acids, and oxidizing agents. (Dry to avoid tendency of product to cake.) Releases sulphur dioxide slowly at ambient temperatures.

ENGINEERING CONTROLS:

Local exhaust if dusty or misty condition prevails. Releases sulphur dioxide gas at ambient temperatures. The TLV may be exceeded without visual warning. Do not use in unventilated spaces, eg. the holds of fishing ships, walk-in coolers, or confined spaces.

SPECIAL SHIPPING REQUIREMENTS:

According to all applicable legislations.

ENVIRONMENTAL PROTECTION DATA

STEPS IN THE EVENT OF A LEAK OR SPILL:

Promptly sweep or shovel up with a minimum of dusting and place in empty closed containers. Cautiously spray residue with plenty of water. Provide ventilation to clear sulphur dioxide fumes which will be generated as a result of water contact.

ENVIRONMENTAL EFFECTS:

AQUATIC TOXICITY: 120 ppm/24, 48, & 96 hr./ mosquito fish/ TLm/ fresh water
(converting bisulphite figure to metabisulphite)

DEACTIVATING CHEMICALS: Not available.

WASTE DISPOSAL METHODS:

Dispose of neutralized or oxidized waste consistent with the requirements of local and/or provincial waste disposal authorities. a) Where required neutralize with alkali. Good ventilation is required during neutralization because of the release of SO₂ gas. b) Where required oxidize to sodium sulphite solution. This may be done by adding a slight excess of diluted hydrogen peroxide carefully and with stirring.

PREPARATION INFORMATION

MSDS PREPARED BY: Technical Department
Panther Industries Inc.

TELEPHONE NUMBER: (306) 567-2814

DATE PREPARED/REVISED: June 10 2007 DATE PRINTED: June 10 2007

REFERENCES: 1. Manufacturer's MSDS.

2. Gessner G. Hawley "The Condensed Chemical Dictionary, Tenth Edition" (Van Nostrand, Reinhold Co.) 1981.