

MATERIAL SAFETY DATA SHEET**Sodium Metabisulphite****Section 01 - Chemical And Product And Company Information**

Product Identifier Sodium metabisulphite

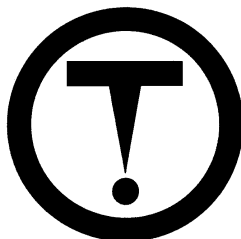
Product Use Antioxidant, bleaching and disinfectant agent in textile, laundering, paper, and fermentation industries.

Supplier Name ClearTech Industries Inc.
2302 Hanselman Avenue
Saskatoon, SK. Canada
S7L 5Z3

Prepared By ClearTech Industries Inc. Technical Department
Phone: (306)664-2522

Preparation Date October 12, 2011

24-Hour Emergency Phone 306-664-2522

**Section 02 - Composition / Information on Ingredients**

Hazardous Ingredients	Sodium metabisulphite	100%
CAS Number	Sodium metabisulphite	7681-57-4
Synonym (s)	Sodium metabisulphite, anhydrous sodium bisulphite, sodium pyrosulphite, disodium disulphite	

Section 03 - Hazard Identification

- 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 / Absorption**..... Repeat or prolonged contact with dust may cause irritation. Contact with solution will irritate.
- Eye Contact**..... Dust or mist may irritate or burn eyes. 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.
- Exposure Limits**..... ACGIH/TLV-TWA: 5mg/m³
NIOSH-TWA: 5mg/m³

Section 04 - First Aid Measures

- Inhalation**..... Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.
- Skin Contact / Absorption**..... Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.
- Eye Contact**..... Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention
- Ingestion**..... Give large amounts of water and induce vomiting. Do not give anything by mouth to an unconscious person or convulsing person. Seek immediate medical attention.
- Additional Information**..... Not available

Section 05 - Fire Fighting

- Conditions of Flammability**..... Non-flammable



- Means of Extinction**..... Product does not burn. When fire is involved, use any fire-fighting agent appropriate for surrounding material; use water spray to cool fire-exposed surfaces.

- Flash Point**..... Not available

- Auto-ignition Temperature**..... Not available

- Upper Flammable Limit** Not available

- Lower Flammable Limit**..... Not available

- Hazardous Combustible 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 protective clothing.

- Explosion Hazards**..... Not available

Section 06 - Accidental Release Measures

- Leak / Spill**..... 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.

- Deactivating Materials**..... Dilute hydrogen peroxide

Section 07 - Handling and Storage

- Handling Procedures**..... Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

- Storage Requirements**..... Store in a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials such as oxidizers and acids.

Section 08 - Personal Protection and Exposure Controls

Protective Equipment

- Eyes**..... Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.
- Respiratory**..... Respiratory protection is not normally required. If use creates vapours, mists, or aerosols, then a NIOSH-approved respirator with a dust/mist cartridge is recommended.
- Gloves**..... Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
- Clothing**..... Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
- Footwear**..... No special footwear is required other than what is mandated at place of work.

Engineering Controls

- Ventilation Requirements**..... Mechanical ventilation (dilution or local exhaust), process or personnel enclosure, and control of process conditions should be provided. Supply sufficient replacement air to make up for air removed by exhaust systems. Because of potential SO₂ generation, installation of continuous monitoring, detection, and alarm systems is recommended.
- Other**..... Emergency shower and eyewash should be in close proximity.

Section 09 - Physical and Chemical Properties

- Physical State**..... Solid
- Odor and Appearance**..... White solid, pungent sulphur dioxide odor.
- Odor Threshold**..... Not available
- Specific Gravity (Water=1)**..... 1.48
- Vapor Pressure (mm Hg, 20C)**..... Not available
- Vapor Density (Air=1)**..... Not available



Evaporation Rate	Not available
Boiling Point	Not applicable
Freeze/Melting Point	Decomposes above 150°C
pH	4.0-4.6 (1% solution)
Water/Oil Distribution Coefficient	Not available
Bulk Density	1.40-1.45kg/cm ³
% Volatiles by Volume	Not available
Solubility in Water	Very soluble
Molecular Formula	Na ₂ S ₂ O ₅
Molecular Weight	190.11

Section 10 - Stability and Reactivity

Stability	Stable under normal conditions.
Incompatibility	Moisture sensitive. Oxidizers may cause strong exothermic reaction. Acids, water, and ice yield sulphur dioxide gas, which is toxic, corrosive and potentially deadly. Temperatures above 150°C cause evolution of sulphur dioxide gas.
Hazardous Products of Decomposition ..	Decomposes to form sulphur dioxide gas which is toxic and corrosive(see above comments) and sodium sulphide residue which is flammable, dangerous fire risk, a strong irritant to skin and tissue and incompatible with acids.
Polymerization	Will not occur.

Section 11 - Toxicological Information

Irritancy	Sodium sulphide residue is a strong irritant.
Sensitization	Not available
Chronic/Acute Effects	Medical conditions aggravated by exposure. May cause severe or deadly allergic reactions if inhaled or in some asthmatics or sulphide sensitive individuals.



Synergistic Materials..... Not available

Animal Toxicity Data..... LD₅₀(oral, rat): 1131mg/kg
LD₅₀(dermal, guinea pig): > 1000mg/kg

Carcinogenicity..... Not considered to be carcinogenic (NTP, OSHA, IARC, ACGIH).

Reproductive Toxicity..... May cause adverse reproductive effects based on animal test data.

Teratogenicity..... Not available

Mutagenicity..... May affect genetic material (mutagenic) based on animal test data.

Section 12 - Ecological Information

Fish Toxicity..... LC₅₀(48 hrs, Rainbow Trout)= 100-200mg/L

Biodegradability..... Not available

Environmental Effects..... This product should be pre-treated prior to entering wastewater streams.

Section 13 - Disposal Consideration

Waste Disposal..... Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 - Transportation Information

TDG Classification

Class..... Not regulated

Group..... Not regulated

PIN Number..... Not regulated

Other..... Secure containers (full and/or empty) with suitable hold down devices during shipment.

Section 15 - Regulatory Information

WHMIS Classification.....D2



NOTE: THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS

Section 16 - Other Information

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / MSDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Material Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service or technical service department.

ClearTech Industries Inc. - Locations

Corporate Head Office: 2302 Hanselman Avenue, Saskatoon, SK, S7L 5Z3

Phone: 306-664-2522

Fax: 306-665-6216

www.ClearTech.ca

Location	Address	Postal Code	Phone Number	Fax Number
Richmond, B.C.	12431 Horseshoe Way	V7A 4X6	604-272-4000	604-272-4596
Calgary, AB.	5516E - 40 th St. S.E.	T2C 2A1	403-279-1096	403-236-0989
Edmonton, AB.	11750 - 180 th Street	T5S 1N7	780-452-6000	780-452-4600
Saskatoon, SK.	2302 Hanselman Avenue	S7L 5Z3	306-933-0177	306-933-3282
Regina, SK.	555 Henderson Drive	S42 5X2	306-721-7737	306-721-8611
Winnipeg, MB.	340 Saulteaux Crescent	R3J 3T2	204-987-9777	204-987-9770
Mississauga, ON.	7480 Bath Road	L4T 1L2	905-612-0566	905-612-0575

24 Hour Emergency Number - All Locations - 306-664-2522