

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

Product Identifier Sodium Bisulphate

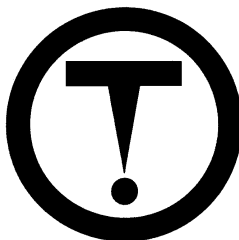
Product Use Industrial pH adjuster, activating acid in formulated dry-acid cleaners,
and metal cleaning compounds, disinfectant

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..... January 5, 2011

24-Hour Emergency Phone..... 306-664-2522

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

Hazardous Ingredients..... Sodium Bisulphate >90%

CAS Number..... Sodium Bisulphate 7681-38-1

Synonym (s)..... Sodium acid sulphate, GBS, globular sodium bisulphate, nitre cake



Section 03 - Hazard Identification

- Inhalation**..... Dust or mist inhalation may irritate nose, throat, and lungs and may cause respiratory tract irritation.
- Skin Contact / Absorption**..... Prolonged contact may result in skin irritation.
- Eye Contact**..... Can cause mild to severe irritation. May cause burns if eyes are not flushed with water.
- Ingestion**..... Small amount are not likely to cause injury, however large amounts ingested can cause severe burns of mouth, throat, and stomach.
- Exposure Limits**..... No established limits. Treat as nuisance particulates.
ACGIH-TLV: 10mg/m³ (total respirable dust)

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 medical attention if difficulties persist.
- Skin Contact / Absorption**..... Remove contaminated clothing. Wash affected area with water for at least 15 minutes. 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 if irritation persists.
- Ingestion**..... Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
- Additional Information**..... Not available

Section 05 - Fire Fighting

- Conditions of Flammability**..... No specific fire or explosive hazard
- Means of Extinction**..... Product does not burn. Use appropriate extinguishing media for material that is supplying the fuel to the fire. Avoid contacting material with water as it readily dissolves in water to form a weak acid solution.
- Flash Point**..... Not applicable



Auto-ignition Temperature..... Not applicable

Upper Flammable Limit Not applicable

Lower Flammable Limit..... Not applicable

Hazardous Combustible Products.... When heated to decomposition at 430°C, oxides of sulphur are formed.

Special Fire Fighting Procedures..... Wear NIOSH-approved self-contained breathing apparatus and protective clothing. If water has to be used, wear acid protective equipment. A self-contained breathing apparatus should be worn if temperatures > 430°C.

Explosion Hazards..... None

Section 06 - Accidental Release Measures

Leak / Spill..... Wear appropriate personal protective equipment as suggested in Section 8. Vacuum or shovel spilled material and place into disposal container. Dilute residual material with water and discharge as per local, provincial and/or federal regulations permit.

Deactivating Materials.....Not available

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 breathing in dust.

Storage Requirements..... Store in a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials. Material is hygroscopic, do not store material where moisture is present. Storage near strong alkalis must be avoided.

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.....For dusty areas > 10mg/m³, NIOSH-approved respirator for dust respirator should be worn.



- Gloves**..... Impervious gloves of chemically resistant material (rubber) should be worn. Wash contaminated clothing and dry thoroughly before reuse.
- Clothing**..... Body suits, aprons, and/or coveralls of chemical resistant material should be worn. 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 to keep particulate below 10mg/m³. Supply sufficient replacement air to make up for air removed by exhaust systems.
- Other**..... Not available

Section 09 - Physical and Chemical Properties

- Physical State**.....Solid
- Odor and Appearance**..... Off-white powder with acidic odour
- Odor Threshold**.....Not available
- Specific Gravity (Water=1)**.....Not available
- Vapor Pressure (mm Hg, 20C)**.....Not available
- Vapor Density (Air=1)**..... Not applicable
- Evaporation Rate**..... Not available
- Boiling Point**..... Not available
- Freeze/Melting Point**..... 177°C
- pH**.....<1 (5% solution)
- Water/Oil Distribution Coefficient**..... Not available
- Bulk Density**..... 1.281-1.361 g/cm³
- % Volatiles by Volume**..... Not available
- Solubility in Water**.....Partially soluble in hot and cold water.
- Molecular Formula**.....NaHSO₄



Molecular Weight..... 120.06

Section 10 - Stability and Reactivity

Stability..... Stable under normal conditions. Avoid storage where moisture is present.

Incompatibility..... Incompatible with strong bases, hypochlorites and ammonium compounds.

Hazardous Products of Decomposition.. Will dissolve in water to form a weak sulphuric solution. Upon decomposition due to extreme heating, oxides of sulphur may form. Reacts with strong bases to evolve heat. Reacts with hypochlorites to form poisonous chlorine gas.

Polymerization..... Will not occur

Section 11 - Toxicological Information

Irritancy..... Mild irritant

Sensitization..... Data not available

Chronic/Acute Effects..... None other than what is listed in Section 3.

Synergistic Materials..... Data not available

Animal Toxicity Data..... LD₅₀(oral,rat): 2800mg/kg

Carcinogenicity..... Not considered to be carcinogenic by IARC, NTP, OSHA and ACGIH.

Reproductive Toxicity..... Not available

Teratogenicity..... Not available

Mutagenicity..... Not available

Section 12 - Ecological Information

Fish Toxicity..... Product dissolves readily in water to form a weak acid, a 0.05% or greater (by weight) solution of this product is very likely to be harmful to aquatic life.



Biodegradability..... Material will decompose in soil. No adverse effects have been noticed when applied directly to crops.

Environmental Effects..... Although material will decompose in soil, excessive quantities should not be applied. No other significant effects or hazards are known.

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