
Section 01 Identification

Product Identifier	Sodium Metabisulphite 35% Solution
Other Means of Identification	Disodium disulphite; Sodium pyrosulphite;
Product Use and Restrictions on Use	Antioxidant, bleaching and disinfectant agent in textile, laundering, paper, and fermentation industries. Production of sulphur dioxide. Dechlorination.
Initial Supplier Identifier	ClearTech Industries Inc 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7 Phone: 800.387.7503 Fax: 888.281.8109 www.cleartech.ca
Prepared By	ClearTech Industries Inc. technical writer
24-Hour Emergency Phone	306.664.2522

Section 02 Hazard Identification

Physical Hazards

This product does not qualify for any physical hazard class under WHMIS 2015

Health Hazards

Serious eye damage / eye irritation Category 1

Signal Word

Danger

Hazard Statements

H318 Causes serious eye damage.

Pictograms



Precautionary Statements

Prevention

P280 Wear protective gloves, protective clothing, eye protection, face protection.

Response

P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Hazards Not Otherwise Classified

Not available

Supplemental Information

Not available

Section 03 Composition / Information on Ingredients

Hazardous Ingredients:

Chemical name	Common name(s)	CAS number	Concentration (w/w%)
Disodium disulphite	Sodium metabisulphite	7681-57-4	34-36%

Section 04 First-Aid Measures

Description of necessary first-aid measures

- Inhalation** Get medical advice / attention if you feel unwell or are concerned.
- Ingestion** Get medical advice / attention if you feel unwell or are concerned.
- Skin contact** Rinse skin with lukewarm, gently flowing water / shower for 5 minutes or until product is removed. If skin irritation occurs or if you feel unwell: Get medical advice / attention.
- Eye contact** Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER or doctor.

Most important symptoms and effects, both acute and delayed

- Inhalation** May cause respiratory irritation. Contact with acids, heat or sunlight releases sulphur dioxide, which causes serious respiratory irritation and is toxic if inhaled.
- Ingestion** May cause discomfort or nausea. This product may provoke a response in those who are sensitive to sulphites.
- Skin contact** This product may provoke a response in those who are sensitive to sulphites.
- Eye contact** Causes serious eye damage.
- Further information** For further information see Section 11 Toxicological Information.

Section 05 Fire Fighting Measures

- Suitable extinguishing media** Extinguish fire using extinguishing agents suitable for the surrounding fire.
- Unsuitable extinguishing media** Not available
- Specific hazards arising from the chemical** In the event of a fire oxides of sulphur may be released. Thermal decomposition occurs at 150 °C.
- Special protective equipment for fire-fighters** Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

Section 06 Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment (See Section 08 Exposure Controls and Personal Protection). Stay upwind, ventilate area. Only enter area with PPE.
Environmental Precautions	Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.
Methods and Materials for Containment and Cleaning Up	<p>Stop or reduce leak if safe to do so.</p> <p>SMALL SPILLS: Approach from upwind, ventilate area. Clean up spill with non-reactive absorbent and place in suitable, covered, labeled containers. Flush area with water. Contaminated absorbent material may pose the same hazards as the spilled product.</p> <p>LARGE SPILLS: Knock down fumes / vapors with fog spray. Contact fire and emergency services and supplier for advice.</p>

Section 07 Handling and Storage

Precautions for Safe Handling	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. Avoid generating vapours, fumes, or mists. Prevent the release of vapours, fumes, or mists into the workplace air. Inspect containers for damage or leaks before handling. If the original label is damaged or missing replace with a workplace label. Have suitable emergency equipment for fires, spills and leaks readily available.
Conditions for Safe Storage	Store in a cool, dry, well-ventilated area, out of direct sunlight, away from heat sources and incompatible materials. Always store in original labeled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible.
Incompatibilities	<p>Acids, such as sulphuric, nitric, hydrochloric, phosphoric, fluosilicic (HFSA), sulphonic, acetic, citric, oxalic, and formic.</p> <p>Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates.</p> <p>Exposure to air or moisture accelerates decomposition.</p>

Section 08 Exposure Controls and Personal Protection

Exposure limits

Component	Regulation	Type of listing	Value
Sodium metabisulphate	NIOSH	REL-TWA	5 mg/m ³
	ACGIH	TWA	5 mg/m ³

Engineering controls

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	A soak hose and eyewash station or emergency shower and eyewash station should be available, tested, and be in close proximity to the product being handled in accordance with provincial regulations.

Protective equipment

The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

Eye and face protection	Where there is potential eye or face exposure, tightly fitting safety goggles and a face shield or a full face respirator or similar protective equipment which protects the wearer's face and eyes are recommended. Contact lenses are not recommended; they may contribute to severe eye injury.
Hand and body protection	Where handling this product it is recommended that skin contact is avoided.
Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
Thermal hazards	Not available

Section 09 Physical and Chemical Properties

Appearance

Physical state	Liquid
Colour	Clear, colourless to pale yellow
Odour	Pungent; sulphurous
Odour threshold	Not available

Property

pH	3.5-5.0
Melting point / freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability	Not applicable
Upper flammable limit	Not available
Lower flammable limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	Not applicable
Solubility	Soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available

Decomposition temperature	150 °C
Viscosity	Not available
Specific gravity	~1.40 g/mL
Formula	Na ₂ S ₂ O ₅
Molecular weight	190.11 g/mol

Section 10 Stability and Reactivity

Reactivity	Reacts with acids to form toxic and corrosive sulphur dioxide.
Stability	This product is stable if stored according to the recommendations in Section 07. Exposure to sunlight or high temperatures may cause the degradation of this product over time.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	Avoid contact with incompatible materials. Do not heat.
Incompatible materials	Acids, such as sulphuric, nitric, hydrochloric, phosphoric, fluosilicic (HFSA), sulphonic, acetic, citric, oxalic, and formic. Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids, hypochlorites and permanganates. Exposure to air or moisture accelerates decomposition.
Hazardous decomposition products	Thermal decomposition may produce oxides of sulphur. Thermal decomposition occurs at 150 °C.

Section 11 Toxicological Information

Acute Toxicity (LD50 values)

Component	Route	Species	Value	Exposure time
ATE of product	Oral	Rat	3231 mg/kg	
	Dermal	Rat	>5000 mg/kg	

Toxic Health Effect Summary

Chemical characteristics	This chemical is a moderate reducing agent.
Skin	Not available
Ingestion	May cause discomfort or nausea.
Inhalation	May cause respiratory irritation.
Eye contact	Causes serious eye damage.
Sensitization	This product may provoke a response in those who are sensitive to sulphites. Sodium metabisulphite was not found to be sensitizing in the standard skin sensitization test.
Mutagenicity	This product and its components at their listed concentration have no known mutagenic effects.
Carcinogenicity	ACGIH has classified sodium metabisulphite as category A4 - Not classifiable as a human carcinogen.

IARC has classified sodium metabisulphite as group 3, not classifiable as to its carcinogenicity to humans.

Reproductive toxicity	This product and its components at their listed concentration have no known reproductive effects.
Specific organ toxicity	This product and its components at their listed concentration have no known effects on specific organs.
Aspiration hazard	Not available
Synergistic materials	Not available

Section 12 Ecological Information

Ecotoxicity

Component	Type	Species	Value	Exposure Time
ATE of product	EC50	Daphnia	254 mg/L	48 hours
	LC50	Fish	91 mg/L	96 hours
	EC50	Algae	137 mg/L	72 hours

Biodegradability This product is highly reactive and will rapidly break down in the environment.

Bioaccumulation This product is not expected to bioaccumulate.

Mobility This product is water soluble, and will not adsorb to soil and may contaminate ground water.

Other adverse effects Chemical oxygen demand (COD): 59 mg/g

Section 13 Disposal Considerations

Waste From Residues / Unused Products Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act.

Contaminated Packaging Do not remove label, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility.

Section 14 Transport Information

UN number	UN2693
UN proper shipping name	BISULPHITES, AQUEOUS SOLUTION, N.O.S. (Sodium Metabisulphite)
Transport hazard class(es)	8
Packing group	III
Excepted quantities	5 L
Environmental hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.

Special precautions	16 (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks).
Transport in bulk	Not available
Additional information	Secure containers (full or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 16 of this SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and published test data regarding the classification of this product are listed in the references at section 16 of this SDS.

Section 15 Regulatory Information

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

Section 16 Other Information

Date of latest revision: May 15, 2019

Note: The responsibility to provide a safe workplace remains with the buyer / user. The buyer / 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 buyer / user to comply with all applicable laws and regulations regarding handling, using, reselling and shipping this product.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the RDC Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached 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 center.

References:

- 1) CHEMINFO
- 2) TOXNET
- 3) eChemPortal
- 4) ECHA
- 5) Transportation of Dangerous Goods Canada
- 6) HSDB
- 7) PAN