
Section 01 Identification

Product Identifier	Sodium Hydrosulphite
Other Means of Identification	Sodium dithionite; dithionous acid, disodium salt; sodium sulfoxylate; 7775-14-6
Product Use and Restrictions on Use	Vat dyeing of fibres and textiles; stripping agent for dyes; bleaching agent; oxygen scavenger for synthetic rubbers.
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

Self-heating substances and mixtures Category 1

Health Hazards

Acute toxicity - oral Category 4

Serious eye damage / eye irritation Category 2

Signal Word

Danger

Hazard Statements

- H251 Self-heating; may catch fire.
- H302 Harmful if swallowed.
- H319 Causes serious eye irritation.

Pictograms



Precautionary Statements

Prevention

- P235 Keep cool.
P264 Wash affected body parts thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective clothing, eye protection, face protection

Response

- P301 P312 P330 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.
P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

- P407 Maintain air gap between stacks or pallets.
P410 Protect from sunlight.
P420 Store separately.

Disposal

- P501 Dispose of contents / container in accordance with all federal, provincial and / or local regulations including the Canadian Environmental Protection Act.

Hazards Not Otherwise Classified

Not available

Supplemental Information

Contact with acids liberates toxic gas.

Section 03 Composition / Information on Ingredients

Hazardous Ingredients:

Chemical name	Common name(s)	CAS number	Concentration (w/w%)
Dithionous acid, disodium salt	Sodium hydrosulphite	7775-14-6	85-100%

Section 04 First-Aid Measures

Description of necessary first-aid measures

- Inhalation** Get medical advice / attention if you feel unwell or are concerned.
- Ingestion** Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.
- 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 15 to 20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice / attention.

Most important symptoms and effects, both acute and delayed

- Inhalation** May cause respiratory irritation.
- Ingestion** Harmful if swallowed.
- Skin contact** Not available
- Eye contact** Causes serious eye irritation.
- 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	Water jets are not recommended in fires involving chemicals.
Specific hazards arising from the chemical	Self-heating; may catch fire. In the event of a fire oxides of sulphur may be released.
Special protective equipment for fire-fighters	Wear NIOSH-approved self-contained breathing apparatus and chemical-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). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Stay upwind, ventilate area.
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	Dry sweeping is not recommended. Pre-dampening the material or use of a vacuum is preferred. Shovel into clean, dry, labeled containers and cover. Flush area with water.

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. 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. Never return contaminated material to its original container.
Conditions for Safe Storage	Store in a cool, dry, well-ventilated area, out of direct sunlight, away from heat sources and incompatible materials. Maintain air gap between stacks or pallets. Store separately. 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	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.

Section 08 Exposure Controls and Personal Protection

Exposure limits

Component	Regulation	Type of listing	Value
Sulphur dioxide	ACGIH	TWA	2 ppm
		STEL / Ceiling	5 ppm

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	An eye wash bottle or eye wash 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 chemical goggles 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	Solid crystalline powder
Colour	White to yellow
Odour	Sulphurous
Odour threshold	Not available

Property

pH	Not available
Melting point / freezing point	Decomposes at 52 °C
Initial boiling point and boiling range	Decomposes at 52 °C
Flash point	Not applicable
Evaporation rate	Not available
Flammability	Non flammable
Upper flammable limit	Not available
Lower flammable limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	2.38 g/cm ³
Solubility	241 g/L @ 20 °C in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	140 °C
Decomposition temperature	52 °C
Viscosity	Not applicable
Specific gravity	Not applicable

Safety Data Sheet

Sodium Hydrosulphite
ClearTech Industries Inc

Formula $\text{Na}_2\text{S}_2\text{O}_4$
Molecular weight 174.107 g/mol

Section 10 Stability and Reactivity

Reactivity Self-heating; may catch fire.
Stability This product is stable if stored according to the recommendations in Section 07.
Possibility of hazardous reactions Hazardous polymerization is not known to occur.
Conditions to avoid Avoid contact with incompatible materials.
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.
Hazardous decomposition products Thermal decomposition may produce oxides of sulphur.

Section 11 Toxicological Information

Acute Toxicity (LD50 / LC50 values)

Component	Route	Species	Value	Exposure time
Sodium hydrosulphite	Oral	Rat	2,500 mg/kg bw	
	Dermal	Rat	>2,000 mg/kg bw	
	Inhalation	Rat	>5.5 mg/L	4 hours

Toxic Health Effect Summary

Chemical characteristics No known effects
Skin Not available
Ingestion Harmful if swallowed.
Inhalation May cause respiratory irritation.
Eye contact Causes serious eye irritation.
Sensitization This product and its components at their listed concentration have no known sensitizing effects.
Mutagenicity This product and its components at their listed concentration have no known mutagenic effects.
Carcinogenicity This product and its components at their listed concentration have no known carcinogenic effects.
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

Safety Data Sheet

Sodium Hydrosulphite
ClearTech Industries Inc

Component	Type	Species	Value	Exposure Time
Sodium hydrosulphite	LC50	Fish	62.3 mg/L	96 hours
	EC50	Aquatic invertebrates	98.3 mg/L	48 hours
	EC50	Algae	206.2 mg/L	72 hours
Biodegradability	The domestic substance list categorizes sodium hydrosulphite as persistent.			
Bioaccumulation	The domestic substance list categorizes sodium hydrosulphite as non-bioaccumulative.			
Mobility	This product is water soluble, is not predicted to adsorb to soil and may contaminate ground water.			
Other adverse effects	Not available			

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	UN1384
UN proper shipping name and description	SODIUM HYDROSULPHITE
Transport hazard class(es)	4.2
Packing group	II
Excepted quantities	0
Environmental hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special precautions	No special provisions
Transport in bulk	ERAP index: 3,000 kg
Additional information	MARPOL 73/78 and IBC Code: This product is not listed in Chapter 17 of the IBC Code. Secure containers (full or empty) 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.

All components of this product appear on the domestic substance list.

Section 16 Other Information

Date of latest revision: February 12, 2021

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