



Safety Data Sheet

Section 01 - Product And Company Identification

Product Identifier	Iron Ferro
Other Means of Identification	None
Product Use and Restrictions on Use	Reagent for water analysis.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Serious Eye Damage/Irritation Category 1

Physical Hazards

No known physical hazards.

Danger

Hazards Statements

H318 – Causes serious eye damage.

Pictograms



Precautionary Statements

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 – Immediately call a POISON CENTER or doctor/physician.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Disodium Disulphite	7681-57-4	20-30%	
Sodium Dithionite	7775-14-6	15-25%	

Section 04 - First Aid Measures

Inhalation	If symptoms are experienced, remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water and non-abrasive soap for 15 minutes. If irritation occurs or persists, seek medical attention.
Eye Contact	Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes, while forcibly holding the eyelid(s) open to ensure complete irrigation of the eye tissue. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens until flushing is complete. Seek immediate medical attention.
Ingestion	Never give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth with water. Seek medical attention.
Additional Information	Not Available

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Dry chemical, dry sand or carbon dioxide.
Unsuitable Extinguishing Media	Water
Specific Hazards Arising From the Chemical	Irritating/toxic sulfur oxides may be generated during a fire.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective gear.
Further Information	Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Avoid formation of dust. Flush with water to remove any residue.
Environmental Precautions	Prevent product from entering sewers or waterways.
Methods and Materials for Containment and Cleaning Up	Sweep or vacuum spilled product and place in suitable, labelled containers for proper disposal.

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.
Conditions for Safe Storage	Store in a cool location, away from heat and direct sunlight. Store away from incompatible materials. Protect from humidity and keep away from water. Protect from the effects of light.
Incompatibilities	Alkali metals, acids, sodium nitrite, sodium chlorite, oxidizing agents.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Disodium Disulphite	ACGIH	TLV-TWA	5 mg/m ³

Engineering Control(s)**Ventilation Requirements**

Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must 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

Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment**Eyes/Face**

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.

Hand Protection

Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Skin and Body Protection

Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

Respiratory Protection

Use breathing protection against the effects of fumes/dust/aerosols.

Thermal Hazards

Not Available

Section 09 - Physical and Chemical Properties**Appearance****Physical State**

Solid, powder

Colour

Whitish

Odour

Sulphurous

Odour Threshold

Not Available

Property**pH**

5.6

Melting Point/Freezing Point

Not Available

Initial Boiling Point and Boiling Range

1461°C

Flash Point

Not Applicable

Evaporation Rate

Not Available

Flammability

Non-flammable

Upper Flammable Limit

Not Applicable

Lower Flammable Limit

Not Applicable

Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	Not Available
Solubility(ies)	Soluble in water.
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	None
Specific Gravity (Water=1)	Not Available
% Volatiles by Volume	Not Available
Formula	Mixture
Molecular Weight	Not Available

Section 10 - Stability and Reactivity

Reactivity	Not Available
Stability	Stable.
Possibility of Hazardous Reactions	Contact with acids releases toxic gases.
Conditions to Avoid	Strong heating.
Incompatible Materials	Alkali metals, acids, sodium nitrite, sodium chlorite, oxidizing agents.
Hazardous Decomposition Products	Sulphur dioxide, nitrogen oxides, carbon monoxide and carbon dioxide, Sulphur oxides.

Section 11 - Toxicological Information

Acute Toxicity Estimate

Component	Oral LD₅₀	Dermal LD₅₀	Inhalation LC₅₀
530560 Iron Ferro	2737 mg/kg	>5000 mg/kg	Not Available

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

Chronic Toxicity – Carcinogenicity

Component	IARC
530560 Iron Ferro	Not Available

Skin Corrosion/Irritation	May cause slight skin irritation.
Ingestion	May cause gastrointestinal discomfort.

Inhalation	Not expected to cause adverse effects.
Serious Eye Damage/Irritation	Strong irritant and may cause severe eye injury.
Respiratory or Skin Sensitization	Sensitizing effect by inhalation and skin contact is possible by prolonged exposure.
Germ Cell Mutagenicity	Disodium disulphite has shown positive results in screening tests for mutagenicity.
Reproductive Toxicity	Not Available
STOT-Single Exposure	Repeated skin exposure can produce local skin destruction or dermatitis.
STOT-Repeated Exposure	Not Available
Aspiration Hazard	Not Available
Synergistic Materials	Not Available

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Disodium Dithionite	Not Available	LC ₅₀ (Lepomis macrochirus, 96hr): 32 mg/L	Not Available
Sodium Dithionite	EC ₅₀ (Algae, 72hr): 206.2 mg/L	LC ₅₀ (Leuciscus idus, 96hr): 63.2 mg/L	EC ₅₀ (Daphnia magna, 48hr): 98.3 mg/L
Biodegradability	Not Available		
Bioaccumulation	Not Available		
Mobility	Not Available		
Other Adverse Effects	Slightly hazardous for water.		

Section 13 – Disposal Considerations

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

Section 14 – Transport Information

UN Number	Not Regulated
UN Proper Shipping Name	Not Regulated
Transport Hazard Class(es)	Not Regulated
Packaging Group	Not Regulated
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special Precautions	Not Available
Transport in Bulk	Not Available

TDG

Other	Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.
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TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

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

Section 16 – Other Information

Preparation Date December 3, 2015

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 / SDS 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 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) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA
- 7) PAN

ClearTech Industries Inc. - Locations

Corporate Head Office: 1500 Quebec Avenue, Saskatoon, SK, S7K 1V7

Phone: 1(306) 664 – 2522

Fax: 1(888) 281-8109

www.cleartech.ca

24 Hour Emergency Number - All Locations – 1(306) 664-2522