



Safety Data Sheet

Section 01 - Identification

Product Identifier	CTI CL5832
Other Means of Identification	None
Product Use and Restrictions on Use	Cationic coagulant used for clarification of water and wastewater in industrial, mining and municipal applications.
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
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Section 02 - Hazard Identification

GHS-Classification

Serious Eye Damage/Irritation Category 2

Physical Hazards

No known physical hazards.

Warning

Hazards Statements

H319 – Causes serious eye irritation.

Pictograms



Precautionary Statements

P264 – Wash hands thoroughly after handling.

P280 – Wear eye protection and 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.

P337 + P313 – If eye irritation persists: Get medical advice/attention.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Epichlorhydrin-dimethylamine Copolymer	25988-97-0	49-75%	

Section 04 - First Aid Measures

Inhalation	If symptoms are experienced, remove victim to fresh air. If breathing difficulties persist, seek medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water and non-abrasive soap. 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 irritation persists, seek 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 if discomfort occurs.
Additional Information	Not Available

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Use extinguishing media suitable for surrounding fire.
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	Hydrogen chloride gas, nitrogen oxides and carbon oxides may form in 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.
Environmental Precautions	Prevent product from entering sewers.
Methods and Materials for Containment and Cleaning Up	Clean up spill with non-reactive absorbent and place in suitable, labelled containers for proper disposal. Flush area with water to remove residue.

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 at temperatures 0-30°C and keep containers tightly closed. Keep away from heat and sources of ignition. Product shelf life expected to be 24 months when storage requirements are followed.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
CTI CL5832			

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 safety goggles with side shields should be worn while product is being handled.

Hand Protection

No specific requirements, but it is good practice to prevent skin contact by wearing impervious gloves of chemical resistance.

Skin and Body Protection

No specific requirements, but it is good practice to prevent skin contact by wearing body suits, aprons, and/or coveralls.

No special footwear is required other than what is mandated at place of work.

Respiratory Protection

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection is normally not needed.

Thermal Hazards

Not Available

Section 09 - Physical and Chemical Properties

Appearance

Physical State

Liquid

Colour

Clear, yellow

Odour

Slight odour

Odour Threshold

Not Available

Property

pH

4-6

Melting Point/Freezing Point

Not Available

Initial Boiling Point and Boiling Range

Not Available

Flash Point

>100°C

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)	Completely soluble in water.
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	>200°C
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Not Available
Specific Gravity (Water=1)	1.14-1.16
% Volatiles by Volume	Not Available
Formula	Not Available
Molecular Weight	Not Available

Section 10 - Stability and Reactivity

Reactivity	Not Available
Stability	Stable.
Possibility of Hazardous Reactions	Hazardous polymerization will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Contact with oxidizers may cause exothermic reactions.
Hazardous Decomposition Products	Hydrogen chloride gas, nitrogen oxides and carbon oxides.

Section 11 - Toxicological Information

Acute Toxicity

Component	Oral LD₅₀	Dermal LD₅₀	Inhalation LC₅₀
CTI CL5832	>2000 mg/kg (rat)	>2000 mg/kg (rat)	Not Available

Chronic Toxicity – Carcinogenicity

Component

IARC

CTI CL5832

Not Available

Skin Corrosion/Irritation	May cause irritation with prolonged contact.
Ingestion	No adverse effects expected.
Inhalation	No adverse effects expected.
Serious Eye Damage/Irritation	May cause severe eye irritation.
Respiratory or Skin Sensitization	Not expected to be sensitizing.
Germ Cell Mutagenicity	Not mutagenic in AMES Test.
Reproductive Toxicity	Not Available
STOT-Single Exposure	Not Available
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
CTI CL5832	Not Available	Not Available	Not Available
Biodegradability	Not readily biodegradable.		
Bioaccumulation	Product does not bioaccumulate.		
Mobility	Not Available		
Other Adverse Effects	Product contains a substance which may be harmful to aquatic organisms.		

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.

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.

NSF Certification.....Product is certified under NSF for coagulation and flocculation at a maximum dosage of: 10 mg/L

NSF product use restrictions based on requirements obtained from the NSF website for current requirements.

Section 16 – Other Information

Preparation Date

January 12, 2016

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

ClearTech Industries Inc. - Locations

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