
Section 01 Identification

Product Identifier	ClearMem 610 Scale Inhibitor
Other Means of Identification	Not available
Product Use and Restrictions on Use	Closed loop ash system scale inhibitor
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
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Section 02 Hazard Identification

Physical Hazards

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

Health Hazards

Skin corrosion / irritation Category 2

Serious eye damage / eye irritation Category 2

Signal Word

Warning

Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Pictograms



Precautionary Statements

Prevention

- P264 Wash affected body parts thoroughly after handling.
P280 Wear protective gloves, eye protection, face protection.

Response

P303 P352 P332 IF ON SKIN (or hair): Wash with plenty of water. If skin irritation occurs: Get medical advice /
P313 P362 P364 attention. Take off contaminated clothing and wash it before reuse.

P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
P337 P313 and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

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%)
Etridonic Acid	HEDP	2809-21-4	15-40%
Potassium salt of Hexamethylenediamine-tetra (methylenephosphonic acid)	HDTMPA K6	38820-59-6	10-30%
Copolymer of Sodium p-Styrene Sulphonate and Maleic Acid	SSS-MA	76282-68-5	3-7%
Carboxylate-sulfonate-nonion terpolymer	Not available	Not available	5-10%

Section 04 First-Aid Measures

Description of necessary first-aid measures

Inhalation Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Ingestion Rinse mouth. Get medical advice / attention if you feel unwell or are concerned.

Skin contact Avoid direct contact. Wear chemical protective clothing, if necessary. Take off immediately contaminated clothing, shoes and leather goods. Rinse skin with lukewarm, gently flowing water / shower for 15 to 20 minutes. Get medical advice / attention. Wash contaminated clothing before re-use, or discard.

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 May cause discomfort or nausea.
Skin contact Causes skin irritation.
Eye contact Causes serious eye irritation. pain, watering, redness
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 carbon and phosphorous may be released.
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	SMALL SPILLS: Approach from upwind, ventilate area. Stop or reduce leak if safe to do so. 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. LARGE SPILLS: Contact fire and emergency services and supplier for advice.

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.
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	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

There are no known exposure limits for this product.

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

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 chemically resistant gloves are worn. Where there is potential for contact with clothing or skin, rubber boots and sufficient body protection, such as: a chemical body suit or an apron and coveralls of chemical resistant material, are recommended. Continued use of contaminated safety gear or clothing is not recommended; wash before reuse or discard.

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 Yellow
Odour Not available
Odour threshold Not available

Property

pH 1.5-3.5
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	Not available
Viscosity	Not available
Specific gravity	1.15 g/mL
Formula	Not applicable
Molecular weight	Not applicable

Section 10 Stability and Reactivity

Reactivity	Not available
Stability	This product is stable if stored according to the recommendations in Section 07.
Possibility of hazardous reactions	Not available
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 carbon and phosphorous.

Section 11 Toxicological Information

Acute Toxicity (LD50 values)

Component	Route	Species	Value	Exposure time
ATE of product	Inhalation - vapor	Rat	>100 mg/L	4 hours
	Dermal	Rabbit	>2000 mg/kg	
	Oral	Rat	>4000 mg/kg	

Toxic Health Effect Summary

Chemical characteristics	No known effects
Skin	24 hour patch test on a rabbit indicates this product is a moderate skin irritant.
Ingestion	May cause discomfort or nausea.

Inhalation	May cause respiratory irritation.
Eye contact	24 hour eye exposure test indicates this products is a moderate eye irritant.
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

Component	Type	Species	Value	Exposure Time
ATE of product	LC50	Fish - Lepomis macrochirus	1030 mg/L	96 hours

Biodegradability	The domestic substance list categorizes HDTMPA K6 as persistent.
Bioaccumulation	The domestic substance list categorizes all of the known components of this product as non-bioaccumulative.
Mobility	This product is water soluble, but will adsorb to soil and is not expected to 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	Not available
UN proper shipping name and description	Not available
Transport hazard class(es)	Not available
Packing group	Not available
Excepted quantities	Not available

Environmental hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special precautions	No special provisions
Transport in bulk	ERAP index: not available MARPOL 73/78 and IBC Code: This product is not listed in Chapter 17 of the IBC Code.
Additional information	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 except Copolymer of Sodium p-Styrene Sulphonate and Maleic Acid and Carboxylate-sulfonate-nonion terpolymer of this product appear on the domestic substance list.

Section 16 Other Information

Date of latest revision: July 03, 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