



# Safety Data Sheet

## Section 01 - Product And Company Identification

Product Identifier	ClearPAC
Other Means of Identification	Poly aluminum chloride
Product Use and Restrictions on Use	Municipal potable water treatment
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

Corrosive to Metals Category 1

### Danger

### Hazards Statements

H318 – Causes serious eye damage.

H290 – May be corrosive to metals.

### Pictograms



### Precautionary Statements

P234 – Keep only in original container.

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.

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

P390 – Absorb spillage to prevent material damage.

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## Section 03 - Composition / Information on Ingredients

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Chemical Name	CAS Number	Weight %	Unique Identifiers
Polyhydroxyl aluminum chloride	1327-41-9	25-40%	

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## Section 04 - First Aid Measures

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<b>Inhalation</b>	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.
<b>Skin Contact / Absorption</b>	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water. Seek medical attention if irritation occurs or persists.
<b>Eye Contact</b>	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 30 minutes or until the chemical is removed, while holding the eyelid(s) open to ensure complete irrigation of the eye tissue. Seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs naturally, lean victim forward to prevent breathing in vomitus. Give large amounts of water. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.
<b>Additional Information</b>	Not Available

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## Section 05 - Fire Fighting Measures

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<b>Suitable Extinguishing Media</b>	Use extinguishing agents suitable for surrounding fire.
<b>Unsuitable Extinguishing Media</b>	Not Available
<b>Specific Hazards Arising From the Chemical</b>	Products of combustion include hydrochloric acid fumes.
<b>Special Protective Equipment and Precautions for Fire-Fighters</b>	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
<b>Further Information</b>	Not Available

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## Section 06 - Accidental Release Measures

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<b>Personal Precautions / Protective Equipment / Emergency Procedures</b>	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.
<b>Environmental Precautions</b>	Prevent material from entering sewers.
<b>Methods and Materials for Containment and Cleaning Up</b>	Neutralize solution with soda ash, lime or limestone. Note that carbon dioxide may form as a result.

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## Section 07 - Handling and Storage

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<b>Precautions for Safe Handling</b>	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.
<b>Conditions for Safe Storage</b>	Ideal storage temperatures should be 10-35°C in a well-ventilated area. Store away from incompatible materials. Keep storage area separate from populated work areas. Do not store in containers made of aluminum, magnesium, zinc, or copper.
<b>Incompatibilities</b>	Strong alkalis, strong acids, oxidizers, zinc, aluminum, and hydro-reactive materials.

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## Section 08 - Exposure Controls and Personal Protection

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### Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Polyhydroxyl aluminum chloride	Not Available		

### Engineering Control(s)

<b>Ventilation Requirements</b>	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.
<b>Other</b>	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

### Protective Equipment

<b>Eyes/Face</b>	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is being handled. Contact lenses should not be worn as they may contribute to severe eye injury.
<b>Hand Protection</b>	Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
<b>Skin and Body Protection</b>	Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
<b>Respiratory Protection</b>	Respiratory protection is not normally required. If use creates vapours, mists, or aerosols, then a NIOSH-approved respirator with a dust/mist cartridge is recommended.
<b>Thermal Hazards</b>	Not Available.

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## Section 09 - Physical and Chemical Properties

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### Appearance

<b>Physical State</b>	Liquid
<b>Colour</b>	Clear
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not Available

### Property

<b>pH</b>	<1
<b>Melting Point/Freezing Point</b>	< -20°C
<b>Initial Boiling Point and Boiling Range</b>	105°C
<b>Flash Point</b>	Not Applicable
<b>Evaporation Rate</b>	Not Available

<b>Flammability</b>	Non-flammable
<b>Upper Flammable Limit</b>	Not Applicable
<b>Lower Flammable Limit</b>	Not Applicable
<b>Vapour Pressure (mm Hg, 20°C)</b>	Not Available
<b>Vapour Density (Air=1)</b>	Not Available
<b>Relative Density</b>	Not Available
<b>Solubility(ies)</b>	Hydrolyses
<b>Partition Coefficient: n-octanol/water</b>	>1
<b>Auto-ignition Temperature</b>	Not Applicable
<b>Decomposition Temperature</b>	Not Available
<b>Viscosity</b>	Not Available
<b>Explosive Properties</b>	None
<b>Specific Gravity (Water=1)</b>	~1.24
<b>% Volatiles by Volume</b>	Not Available
<b>Formula</b>	Complex mixture
<b>Molecular Weight</b>	Not Applicable. Mixture.

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## Section 10 - Stability and Reactivity

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<b>Reactivity</b>	Not Available
<b>Stability</b>	Normally stable.
<b>Possibility of Hazardous Reactions</b>	Polymerization will not occur.
<b>Conditions to Avoid</b>	Not Available
<b>Incompatible Materials</b>	Avoid contact with strong alkalis, strong acids, oxidizers, zinc, aluminum, and hydro-reactive materials.
<b>Hazardous Decomposition Products</b>	May liberate Sulphur, aluminum oxides, hydrogen chloride, and chlorine when boiled to dryness or heated above 200°C.

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## Section 11 - Toxicological Information

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### Acute Toxicity

Component	Oral LD <sub>50</sub>	Dermal LD <sub>50</sub>	Inhalation LC <sub>50</sub>
ClearPAC	>5000mg/kg (rat)	Not Available	Not Available

## Chronic Toxicity – Carcinogenicity

### Component

### IARC

Polyhydroxyl aluminum chloride

Not considered carcinogenic to humans.

<b>Skin Corrosion/Irritation</b>	Direct contact can cause irritation and possible corrosive burns.
<b>Ingestion</b>	Ingestion can cause corrosive burns to mouth, throat and esophagus.
<b>Inhalation</b>	Irritation of the respiratory tract may result from mist exposure.
<b>Serious Eye Damage/Irritation</b>	Corrosive to the eyes.
<b>Respiratory or Skin Sensitization</b>	Not considered a respiratory or skin sensitizer.
<b>Germ Cell Mutagenicity</b>	Not Available
<b>Reproductive Toxicity</b>	Not Available
<b>STOT-Single Exposure</b>	Not Available
<b>STOT-Repeated Exposure</b>	Repeated and prolonged exposure of the skin to low concentrations of liquid can cause dermatitis.
<b>Aspiration Hazard</b>	Small amounts of product which enter the lungs during ingestion or vomiting can cause serious lung injury and death.
<b>Synergistic Materials</b>	Not Available

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## **Section 12 – Ecological Information**

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### Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Polyhydroxyl aluminum chloride	Not Available	Not Available	Not Available
<b>Biodegradability</b>	Not Available		
<b>Bioaccumulation</b>	Not Available		
<b>Mobility</b>	Not Available		
<b>Other Adverse Effects</b>	Contact with lead pipes may lead to increased lead content.		

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## **Section 13 – Disposal Considerations**

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

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## **Section 14 – Transport Information**

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<b>UN Number</b>	UN3264
<b>UN Proper Shipping Name</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Polyhydroxyl aluminum chloride)
<b>Transport Hazard Class(es)</b>	8
<b>Packaging Group</b>	III
<b>Environmental Hazards</b>	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
<b>Special Precautions</b>	Not Available

Transport in Bulk Not Available

Additional Information	Packing Group	Limited Quantity Index
	I	0
	II	1 L
	III	5 L

**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.

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## Section 15 – Regulatory Information

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**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: 250mg/L

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

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## Section 16 – Other Information

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**Preparation Date** October 19, 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

**ClearTech Industries Inc. - Locations**  
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**24 Hour Emergency Number - All Locations – 1(306) 664-2522**