



# Safety Data Sheet

## Section 01 - Identification

Product Identifier	ClearPAC 180
Other Means of Identification	Poly aluminum chloride
Product Use and Restrictions on Use	Drinking 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
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## Section 02 - Hazard Identification

### GHS-Classification

Serious Eye Damage/Irritation Category 1

### Physical Hazards

Corrosive to Metals Category 1

### Danger

### Hazards Statements

H290 – May be corrosive to metals.

H318 – Causes serious eye damage.

### Pictograms



### Precautionary Statements

P234 – Keep only in original container.

P390 – Absorb spillage to prevent material damage

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.

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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	30-60%	

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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 immediate medical attention.
<b>Skin Contact / Absorption</b>	Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.
<b>Eye Contact</b>	Contact lenses should never be worn when working with this product. Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs, 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>	Does not burn or support combustion. Use extinguishing agents suitable for surrounding fire.
<b>Unsuitable Extinguishing Media</b>	Not Available
<b>Specific Hazards Arising From the Chemical</b>	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 from entering sewers.
<b>Methods and Materials for Containment and Cleaning Up</b>	Neutralize with alkaline material. Dilute solutions with soda ash, lime, or limestone. Note that carbon dioxide may form as a result, ensure area has proper ventilation.

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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 incompatibles. Keep storage area separate from populated work areas. Do not store in containers made of aluminum, magnesium, zinc, copper.

**Incompatibilities**

Avoid contact with strong alkalis, strong acids, oxidizers, zinc, aluminum, and hydro-reactive materials.

## **Section 08 - Exposure Controls and Personal Protection**

### **Exposure Limit(s)**

<b>Component</b>	<b>Regulation</b>	<b>Type of Listing</b>	<b>Value</b>
Polyhydroxyl aluminum chloride	Not Available		

### **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**

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.

#### **Thermal Hazards**

Not Available

## **Section 09 - Physical and Chemical Properties**

### **Appearance**

#### **Physical State**

Liquid

#### **Colour**

Clear, yellow to light brown

#### **Odour**

Hydrochloric acid odour

#### **Odour Threshold**

Not Available

### **Property**

#### **pH**

1

#### **Melting Point/Freezing Point**

-20°C

#### **Initial Boiling Point and Boiling Range**

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>	90°C
<b>Viscosity</b>	Not Available
<b>Explosive Properties</b>	None
<b>Specific Gravity (Water=1)</b>	1.3-1.4
<b>% Volatiles by Volume</b>	Not Available
<b>Formula</b>	Complex mixture
<b>Molecular Weight</b>	Not Available

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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>	Hazardous polymerization will not occur.
<b>Conditions to Avoid</b>	Avoid temperatures below 0°C and above 35°C.
<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

<b>Component</b>	<b>Oral LD<sub>50</sub></b>	<b>Dermal LD<sub>50</sub></b>	<b>Inhalation LC<sub>50</sub></b>
ClearPac 180	Not Available	Not Available	Not Available

## Chronic Toxicity – Carcinogenicity

Component	IARC
Polyhydroxyl aluminum chloride	Not considered to be carcinogenic by NTP, IARC, and OSHA.
<b>Skin Corrosion/Irritation</b>	Direct contact can cause irritation and possible corrosive burning.
<b>Ingestion</b>	Ingestion can cause corrosive burns to mouth, throat, and esophagus. Small amounts of product which enter the lungs during ingestion or vomiting can cause serious lung injury and death.
<b>Inhalation</b>	Product does not readily form a vapour, so inhalation is only likely to occur if a mist is formed. Irritation of respiratory tract may result from mist exposure.
<b>Serious Eye Damage/Irritation</b>	Damage can range from mild irritation to burning.
<b>Respiratory or Skin Sensitization</b>	Not a sensitizer
<b>Germ Cell Mutagenicity</b>	Not Available
<b>Reproductive Toxicity</b>	No known reproductive hazards.
<b>Single Target Organ Toxicity- Single Exposure</b>	May be irritating to nose, throat, and respiratory tract.
<b>Single Target Organ Toxicity- Repeated Exposure</b>	Not Available
<b>Aspiration Hazard</b>	Not Available
<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	LC <sub>50</sub> (Danio, 96hr): >1000mg/L	EC <sub>50</sub> (Daphnia, 48hr): 98mg/L
<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 chlorosulphate)
<b>Transport Hazard Class(es)</b>	8
<b>Packaging Group</b>	II

**Environmental Hazards** Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.  
**Special Precautions** Not Available  
**Transport in Bulk** Not Available

**Additional Information**

<u>Packing Group</u>	<u>Limited Quantity Index</u>
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.

## **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: 200 mg/L

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

## **Section 16 – Other Information**

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**Preparation Date** August 21, 2015

**Revision Date** 2018 March 5

**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<sup>®</sup> 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

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