

**SECTION 1: IDENTIFICATION****Product Identifier****Product Form:** Mixture**Product Name:** EC-309HB**Intended Use of the Product**

**Use of the Substance/Mixture:** Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking. Paper machine pitch control. Retention and drainage aid, pitch control, and neutral size bonding agent for paper machines operating in the pH range of 6.0 to 7.8. Point of application to the paper machine is critical in obtaining maximum benefit. This product may be used on fourdrinier and cylinder machines, as well as twin wire formers. It is effective for a variety of paper and board grades.

**Name, Address, and Telephone of the Responsible Party****Manufacturer**

CHEMTRADE LOGISTICS INC.

155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5

For SDS Info: (416) 496-5856

www.chemtradelogistics.com

**Emergency Telephone Number****Emergency Number :**

Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the Substance or Mixture****Classification (GHS-US)**

Met. Corr. 1 H290

Eye Dam. 1 H318

**Label Elements****GHS-US Labeling****Hazard Pictograms (GHS-US)** :

GHS05

**Signal Word (GHS-US)** :

: Danger

**Hazard Statements (GHS-US)** :

: H290 - May be corrosive to metals

H318 - Causes serious eye damage

**Precautionary Statements (GHS-US)** :

: P234 - Keep only in original container.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

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 a POISON CENTER, a doctor.

P390 - Absorb spillage to prevent material damage.

P406 - Store in corrosive resistant container with a resistant inner liner.

**Other Hazards****Other Hazards Not Contributing to the Classification:** Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.**Unknown Acute Toxicity (GHS-US)** Not available

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	60 - 100	Not classified
Aluminum chloride, basic†	(CAS No) 1327-41-9	15 - 40	Met. Corr. 1, H290 Eye Dam. 1, H318

Full text of H-phrases: see section 16

† Aluminum chloride, basic causes serious eye damage in solution when  $\text{pH} \leq 2$ . In solution when  $\text{pH} > 2$ , this substance causes serious eye irritation

\*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

\*\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.

**Ingestion:** Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

#### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Causes serious eye damage. Causes skin irritation. May cause respiratory irritation.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes serious eye damage.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Corrosive to metals. Contact with metals may evolve flammable hydrogen gas.

#### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Oxides of aluminum.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

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### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

### Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### Methods and Material for Containment and Cleaning Up

**For Containment:** Collect spillage.

**Methods for Cleaning Up:** Absorb and/or contain spill with inert material, then place in suitable container.

### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Use good housekeeping practices during storage, transfer and handling.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Non acid-proof metals. Galvanized surfaces.

### Specific End Use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking. Paper machine pitch control. Retention and drainage aid, pitch control, and neutral size bonding agent for paper machines operating in the pH range of 6.0 to 7.8. Point of application to the paper machine is critical in obtaining maximum benefit. This product may be used on fourdrinier and cylinder machines, as well as twin wire formers. It is effective for a variety of paper and board grades.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

### Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Gloves. Corrosionproof clothing.

**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves. Wear protective gloves made from PVC, neoprene, nitrile, vinyl, or PVC/NBR.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

**Physical State** : Liquid

**Appearance** : Colorless to light amber

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<b>Odor</b>	: Not available
<b>Odor Threshold</b>	: Not available
<b>pH</b>	: 0.6 - 4.0
<b>Melting Point</b>	: Not available
<b>Freezing Point</b>	: Not available
<b>Boiling Point</b>	: Not available
<b>Flash Point</b>	: Not flammable
<b>Auto-ignition Temperature</b>	: Not applicable
<b>Decomposition Temperature</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not applicable
<b>Lower Flammable Limit</b>	: Not applicable
<b>Upper Flammable Limit</b>	: Not applicable
<b>Vapor Pressure</b>	: Not available
<b>Relative Vapor Density at 20 °C</b>	: Not available
<b>Specific Gravity</b>	: 1.22 - 1.28
<b>Solubility</b>	: 100%
<b>Partition Coefficient: N-octanol/water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>Explosion Data – Sensitivity to Mechanical Impact</b>	: Not expected to present an explosion hazard due to mechanical impact.
<b>Explosion Data – Sensitivity to Static Discharge</b>	: Not expected to present an explosion hazard due to static discharge.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Corrosive to metals. Contact with metals may evolve flammable hydrogen gas.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Non acid-proof metals. Galvanized surfaces.

**Hazardous Decomposition Products:** Hydrochloric acid fumes may be generated.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**pH:** 0.6 - 4.0

**Serious Eye Damage/Irritation:** Causes serious eye damage.

**pH:** 0.6 - 4.0

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Causes skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

#### Information on Toxicological Effects - Ingredient(s)

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### LD50 and LC50 Data:

<b>Aluminum chloride, basic (1327-41-9)</b>	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
<b>Water (7732-18-5)</b>	
LD50 Oral Rat	> 90000 mg/kg

## SECTION 12: ECOLOGICAL INFORMATION

**Toxicity** Not classified

**Persistence and Degradability** Not available

**Bioaccumulative Potential** Not available

**Mobility in Soil** Not available

**Other Adverse Effects** Not available

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 In Accordance with DOT

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS POLYALUMINUM HYDROXYCHLORIDE)  
**Hazard Class** : 8  
**Identification Number** : UN3264  
**Label Codes** : 8  
**Packing Group** : III  
**ERG Number** : 154



### 14.2 In Accordance with IMDG

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS POLYALUMINUM HYDROXYCHLORIDE)  
**Hazard Class** : 8  
**Identification Number** : UN3264  
**Packing Group** : III  
**Label Codes** : 8  
**EmS-No. (Fire)** : F-A  
**EmS-No. (Spillage)** : S-B



### 14.3 In Accordance with IATA

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS POLYALUMINUM HYDROXYCHLORIDE)  
**Packing Group** : III  
**Identification Number** : UN3264  
**Hazard Class** : 8  
**Label Codes** : 8  
**ERG Code (IATA)** : 8L



### 14.4 In Accordance with TDG

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS POLYALUMINUM HYDROXYCHLORIDE)  
**Packing Group** : III  
**Hazard Class** : 8  
**Identification Number** : UN3264  
**Label Codes** : 8



## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

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<b>Aluminum chloride, basic (1327-41-9)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Water (7732-18-5)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### US State Regulations

Neither this product nor its chemical components appear on any US state lists.

### Canadian Regulations

<b>EC-309HB</b>	
WHMIS Classification	Class E - Corrosive Material
	
<b>Aluminum chloride, basic (1327-41-9)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class E - Corrosive Material
<b>Water (7732-18-5)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision date** : 05/08/15  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
H290	May be corrosive to metals
H318	Causes serious eye damage

### Party Responsible for the Preparation of This Document

CHEMTRADE LOGISTICS, INC.  
For SDS Info: (416) 496-5856

*Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.*



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