



Safety Data Sheet

Section 01 - Identification

Product Identifier	NIAD I-3
Other Means of Identification	None
Product Use and Restrictions on Use	Flocculent
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

Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Corrosion	Category 1

Physical Hazards

Corrosive to Metals	Category 1
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Danger

Hazards Statements

H314 – Causes severe skin burns and eye damage.
H290 – May be corrosive to metals.

Pictograms



Precautionary Statements

P234 – Keep only in original container.
P405 – Store locked up.
P260 – Do not breathe mist, vapours or spray.
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 – Wash contaminated clothing before reuse.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P301 +P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P310 – Immediately call a POISON CENTER or doctor/physician.
 P390 – Absorb spillage to prevent material damage.
 P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Polyhydroxy aluminum chlorosulphate	1327-41-9	30-60%	
Water	7732-18-5	70-40%	

Section 04 - First Aid Measures

Inhalation	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.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water. Seek immediate medical attention. Completely decontaminate clothing, shoes and leather goods before reuse or discard.
Eye Contact	Flush immediately with water. After initial flushing, remove any contact lenses if easy to do so and continue flushing for 30 minutes while holding eyelids open. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Give conscious patients fluids. Call a physician and/or transport to medical facility. If victim is unconscious, never induce vomiting or give fluids. Place victim in a stable side position and keep warm.
Additional Information	Not Available

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	As required for surrounding fire (carbon dioxide, dry chemical, foam or water spray).
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	Hydrogen chloride is evolved on boiling. Hazardous combustion products may include but are not limited to oxides of Aluminum, carbon, nitrogen, ammonia, hydrogen chloride and other products.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
Further Information	Evacuate non-emergency personnel to a safe area. Contact emergency personnel as necessary. Avoid breathing smoke, fumes and decomposition products.

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 material from entering sewers.

Methods and Materials for Containment and Cleaning Up

Spill can be neutralized with sodium carbonate, caution should be taken as carbon dioxide will be evolved.
SMALL SPILLS: Absorb spill with inert material.
LARGE SPILLS: Absorb spill with inert material (ie: dry sand or earth) then place in a chemical waste container. Flush with water to remove any 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. Avoid inhalation of vapour or mists.

Conditions for Safe Storage

Keep container closed when not in use. Keep from freezing. Avoid temperatures below 0°C. Avoid temperatures above 35°C. Keep from incompatible materials.

Incompatibilities

Strong acids, strong bases, aluminum and zinc.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Polyhydroxy Aluminum Chloride	ACGIH	TWA	2mg/m ³ (as Al)

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

Generally not required. Wear an approved NIOSH/MSHA respirator with mist cartridge if necessary.

Thermal Hazards

Not Available

Section 09 - Physical and Chemical Properties

Appearance**Physical State**

Liquid

Colour

Clear amber

Odour	Slight hydrochloric acid odour.
Odour Threshold	Not Available
<u>Property</u>	
pH	< 1
Melting Point/Freezing Point	-20°C
Initial Boiling Point and Boiling Range	105°C
Flash Point	Not Available
Evaporation Rate	Slow
Flammability	This product is not classified as flammable or combustible according to WHMIS.
Upper Flammable Limit	Not Available
Lower Flammable Limit	Not Available
Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	Not Available
Solubility(ies)	Appreciable
Partition Coefficient: n-octanol/water	> 1
Auto-ignition Temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Not sensitive to static discharge or mechanical impact.
Specific Gravity (Water=1)	1.4
% Volatiles by Volume	> 50%
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	Strong acids, strong bases, aluminum and zinc.

Incompatible Materials	Avoid temperatures below 0°C and above 35°C.
Hazardous Decomposition Products	Thermal decomposition products include oxides of Aluminum.

Section 11 - Toxicological Information

Acute Toxicity

Component	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Polyhydroxy aluminum chlorosulphate	Not Available	Not Available	Not Available

Chronic Toxicity – Carcinogenicity

Component	IARC
Polyhydroxy aluminum chlorosulphate	Not considered to be carcinogenic as per IARC, NTP, OSHA and ACGIH.

Skin Corrosion/Irritation	Corrosive. Capable of producing severe burns, blisters, ulcers and permanent scarring.
Ingestion	Under normal industrial use, ingestion is not considered a probable route of exposure. Corrosive to mouth, throat and stomach.
Inhalation	May be irritating to the nose, throat, and respiratory tract.
Serious Eye Damage/Irritation	Corrosive. Capable of producing serious eye burns and permanent damage, including blindness.
Respiratory or Skin Sensitization	No sensitizing effects known.
Germ Cell Mutagenicity	Not Available
Reproductive Toxicity	No known reproductive hazards.
STOT-Single Exposure	May be irritating to nose, throat, and respiratory tract.
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
Polyhydroxy aluminum chlorosulphate	Not Available	Not Available	Not Available
Biodegradability	Not Available		
Bioaccumulation	Not Available		
Mobility	Not Available		
Other Adverse Effects	Not Available		

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	UN3264								
UN Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Polyhydroxy aluminum chlorosulphate)								
Transport Hazard Class(es)	8								
Packaging Group	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	<table><thead><tr><th><u>Packing Group</u></th><th><u>Limited Quantity Index</u></th></tr></thead><tbody><tr><td>I</td><td>0</td></tr><tr><td>II</td><td>1 L</td></tr><tr><td>III</td><td>5 L</td></tr></tbody></table>	<u>Packing Group</u>	<u>Limited Quantity Index</u>	I	0	II	1 L	III	5 L
<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

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.

Section 16 – Other Information

Preparation Date August 27, 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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