Safety Data Sheet: CHEM-AQUA 81101

Supercedes Date 02/25/2010 **Issuing Date** 04/24/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 81101
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC

BOX 152170
IRVING, TEXAS 75015

Product Code 0C26
Chemical nature Aqueous solution of metal salts
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless - Amber **Physical State** Liquid **Odor** Slight Amine-like

GHS Classification

Physical Hazards

Substances/mixtures corrosive to metal	Category 1

Health Hazard

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2B

Other hazards
None

Labeling
Signal Word
WARNING

Hazard Statements
H315 - Causes skin irritation
H320 - Causes eye irritation
H290 - May be corrosive to metals

Precautionary Statements
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs, get medical attention.
P362 - Take off contaminated clothing and wash 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.
P337 + P313 - If eye irritation persists, get medical attention.
P406 - Store in a corrosion-resistant container.
P390 - Absorb spillage to prevent damage
P501 - Dispose of contents and container in accordance with applicable regulations.

5 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Aluminum chloride hydroxide	12042-91-0	30-60
Epichlorohydrin-dimethylamine copolymer	25988-97-0	3-7

4. FIRST AID MEASURES

General advice Avoid contact with skin, eyes and clothing. Avoid breathing mist.
Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing

before re-use.

Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.
Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash **Method** Not applicable
Flammability Limits in Air % Not applicable. **Upper** No data available **Lower** No data available
Suitable Extinguishing Media
Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards arising from the chemical
Material can create slippery conditions.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	**Health** 2	**Flammability** 0	**Instability** 0
HMIS	**Health** 2	**Flammability** 0	**Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Solutions extremely slippery when spilled.
Environmental Precautions Do not flush into surface water or sanitary sewer system.
Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing. Avoid breathing mist.
Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Storage Temperature	**Minimum**	35 °F / 2 °C		**Maximum**	120 °F / 49 °C
Storage Conditions	**Indoor**	X	**Outdoor**	**Heated**	**Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Aluminum chloride hydroxide	TWA: 1 mg/m^3	No data available	No data available
Epichlorohydrin-dimethylamine copolymer	No data available	No data available	No data available

Engineering Measures Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment
Eye/Face Protection Safety glasses with side-shields.
Skin Protection Wear suitable protective clothing, Impervious gloves.
Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General Hygiene Considerations Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Slight viscous
Color	Colorless - Amber	**Odor**	Slight Amine-like
Odor Threshold	Not applicable	**Appearance**	Transparent - Slightly Hazy
pH	3	**Specific Gravity**	1.325
Evaporation Rate	< 1 (Butyl acetate=1)	**Percent Volatile (Volume)**	60
VOC Content (%)	0	**VOC Content (g/L)**	0
Vapor Pressure	No information available	**Vapor Density**	No data available
Solubility	Completely soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available

Boiling Point/Range	> 219 °F / 104 °C	**Flammability (solid, gas)**	No data available
Flash Point	Does not flash	**Method**	Not applicable
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Not applicable.	**Upper** No data available **Lower** No data available	

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.
Conditions to Avoid None known
Incompatible Products Alkalis
Hazardous Decomposition Products Fumes of aluminum, Hydrogen chloride gas, Chlorine.
Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):
Oral LD50 No information available
Dermal LD50 No information available
Inhalation LC50
Gas No information available
Mist No information available
Vapor No information available

Principle Route of Exposure Eye contact, Skin contact.
Primary Routes of Entry None known
Acute Effects
Eyes Causes eye irritation.
Skin Causes skin irritation.
Inhalation May cause irritation of respiratory tract.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Toxicity None known.
Target Organ Effects None known
Aggravated Medical Conditions Skin disorders, Respiratory disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Aluminum chloride hydroxide	= 9187 mg/kg (Rat)	> 2000 mg/kg (Rat)	no data available	no data available	no data available
Epichlorohydrin-dimethylamine copolymer	no data available	no data available	no data available	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Aluminum chloride hydroxide	no data available	no data available	no data available	no data available	no data available
Epichlorohydrin-dimethylamine copolymer	no data available	no data available	no data available	no data available	no data available

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Aluminum chloride hydroxide	not applicable	not applicable	not applicable	not applicable	not applicable
Epichlorohydrin-dimethylamine copolymer	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Aluminum chloride hydroxide	no data available	LC50 100 - 500 mg/L Brachydanio rerio 96 h	no data available	no data available	N/A
Epichlorohydrin-dimethylamine copolymer	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.
Hazard Class 8
UN-No UN3264
Packing Group III
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s.,(Polyaluminum Chloride) 8, PG III (Exceptions may exist under 49 CFR 173.154(d))

TDG

Hazard Class 8
UN-No UN3264
Packing Group III

ICAO

UN-No UN3264
Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.
Hazard Class 8
Packing Group III
Shipping Description UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S.,(Polyaluminum Chloride),8,PG III

IATA

UN-No UN3264
Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.
Hazard Class 8
Packing Group III
ERG Code 8L
Shipping Description UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S.,(Polyaluminum Chloride),8,PG III

IMDG/IMO

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.
Hazard Class 8
UN-No UN3264
Packing Group III
EmS No. F-A, S-B
Shipping Description UN3264, Corrosive Liquid, Acidic, Inorganic, N.O.S.,(Polyaluminum Chloride),8,PG III

15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies
U.S. Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Aluminum chloride hydroxide	Not applicable	Not applicable
Epichlorohydrin-dimethylamine copolymer	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Devon Kebodeaux
Supercedes Date 02/25/2010
Issuing Date 04/24/2014

Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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