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Material Safety Data

SECTION 1. Chemical Product And Company Identification

Product Name: Maintain Pool Pro Hydro Floc, HYDRO FLOC

Product Id: 5780

Date: 04-15-12

Product/Chemical Name: Aluminum chloride hydroxide sulfate

Chemical Formula: $Al_a(OH)_bCl_c$ where b/a varies around 2.5

CAS #: 39290-78-3

General Use: Water Treatment Chemical

Edition: 02

Supplier: USALCO, LLC

2601 Cannery Avenue

Baltimore, MD 21226

Phone: 410-354-0100

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EMERGENCY PHONE NUMBERS
24-HOUR PHONE NUMBER: 1-800-282-5322
CHEMTREC: 1-800-424-9300
INFORMATION 1-800-752-5151

HMIS:

H	1
F	0
R	0

PPE†

† SEC. 11

SECTION 2. Composition / Information on Ingredients

Ingredient Name	CAS NUMBER	% WT
Aluminum Chloride Hydroxide Sulfate (Polyaluminum Chloride, Polyaluminum Hydroxychlorosulfate)	39290-78-3	15-45
Water	7732-18-5	55-85

	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
Ingredient	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Aluminum chloride hydroxide sulfate	2 mg/m ³ As aluminum	None Estab.	2 mg/m ³ As aluminum	None Estab.	2 mg/m ³ As aluminum	None Estab.	None Estab.

SECTION 3. Emergency Overview

Description: Clear or amber liquid. pH 2-3.5. Not volatile. Not flammable.

Hazards: Harmful by ingestion and in contact with skin. Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 4. First Aid

Inhalation: (mist or spray) Remove from exposure; seek medical treatment if any symptoms occur.

Eye Contact: Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting upper and lower lids. Seek medical attention.

Skin Contact: Remove contaminated clothing and wash contaminated skin with water.

Ingestion: Do not induce vomiting. If conscious have the victim rinse mouth then drink large amount of water.

Seek medical treatment immediately.
After first aid, get appropriate medical support

SECTION 5. Physical and Chemical Properties

Physical State: Liquid
Appearance: Colorless to clear amber
Odor Threshold: Negligible odor
Vapor Pressure: NA
Vapor Density: NA
pH: >2 – 3.5
Specific Gravity (H₂O =1, at 4°C): >1.2
Water Solubility: Complete
Boiling Point: >110°C / 230°F
Viscosity: 5-50 Centisrokes at 25°C
Density: NA
% Volatile: NA

SECTION 6. Fire Fighting Measures

Flash Point: NA
Burning Rate: NA
Autoignition Temperature: NA
LEL: NA
UEL: NA
Flammability Classification: Not flammable
Extinguishing Media: NA
Unusual Fire or Explosion Hazards: May decompose to Hydrogen chloride and SO₂ in a fire. If fumes are present, wear an OSHA/NIOSH approved full-face respirator with an acid gas cartridge or SCBA.
Hazardous Combustion Products: See Section 7
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

SECTION 7. Stability and Reactivity

Stability: Product degrades at elevated temperatures. Avoid temperatures above 45°C (113°F).
Polymerization: Hazardous polymerization does not occur.
Chemical Incompatibilities: Reacts with Zinc and Aluminum to form Hydrogen gas. Contact with strong alkalis (e.g. Ammonia and its solutions, Sodium hydroxide (caustic), Potassium hydroxide, chlorites) may generate heat, splattering or boiling and toxic vapors.
Conditions to Avoid: N/A.
Hazardous Decomposition Products: May decompose to HCl and SO₂ at high temperatures.

SECTION 8. Health Hazard Information

Primary Entry Routes: Ingestion.
Target Organs: N/A.
Acute Effects: No unusual.
Eye: May cause a burning feeling.
Skin: May cause a skin rash or burning feeling.
Ingestion: Abdominal pain. Burning sensation. Nausea. Vomiting.
Carcinogenicity: IARC, NTP, and OSHA do not list Aluminum chloride hydroxide sulfate as a carcinogen.
Medical Conditions Aggravated by Long-Term Exposure: None reported.
Chronic Effects: There is no evidence that Aluminum chloride hydroxide sulfate causes cancer or affects reproduction.

SECTION 9. Spill, Leak, and Disposal Procedures

Spill/Leak Procedures: Spill procedures are dictated by site wastewater flow controls and will vary from site to site. General procedures are provided in this document, but authorization for any wastewater discharge must be obtained prior to the discharge.

Small Spills: If directed to an industrial sewer, wash down with large volumes of water. Spills can be neutralized and absorbed with soda ash or lime, but neutralization will release carbon dioxide, which can generate a breathing hazard.

Large Spills: For large spills, dike far ahead of liquid spill or later disposal. Do not release into sewers or waterways. Pump residue into storage containers or neutralize with lime or soda ash. Neutralization will release carbon dioxide, which can generate a breathing hazard.

Cleanup: Wash or neutralize impacted areas after liquid removal to remove residues.

Regulatory Requirements: Aluminum chloride hydroxide sulfate does not have a reportable quantity under CERCLA. Follow applicable Federal, state and local regulations.

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state and local regulations.

Container Cleaning and Disposal: Rinse with water, dispose of containers in accordance with State and local regulations.

SECTION 10. Regulatory Information

EPA Regulations: May be D002 under §261.22(a)(2) (corrosion of steel)

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Characteristic: Corrosivity.

CERCLA Hazardous Substance (40 CFR 302.4): Not listed CWA, Sec. 311 (b)(4).

CERCLA Reportable Quantity (RQ): NA

SARA 311/312 Category: acute (immediate) health hazard

SARA Toxic Chemical (40 CFR 372.65): Not listed.

SARA EHS (extremely hazardous substance): not listed.

TSCA Section 8(b) – Inventory Status: all chemicals in this product are either exempt or listed on the TSCA inventory.

OSHA Regulations:

Air Containment (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29 CFR 1910): Not listed.

State Regulations: State specific regulations have not been determined by USALCO, LLC.

Section 11. Exposure Controls / Personal Protection

Ventilation: Under normal conditions, Aluminum chloride hydroxide sulfate will not generate mists or vapors. No special ventilation is recommended.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective chemical safety goggles, per OSHA eye- and face protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 12. Special Precautions and Comments

Handling Precautions: Ensure that all containers are labeled in accordance with OSHA regulations. Treat as a dilute acid. Avoid contact with metal, as product will slowly corrode iron, brass, copper, aluminum and mild steel. Avoid skin and eye contact. Wear appropriate protective clothing.

Storage Requirements: Store in rubber-lined, plastic or FRP vessels. Keep storage temperature below 30°C/86°F. Store away from incompatible materials. Keep containers tightly closed when not in use.

SECTION 13. DOT Transportation Data (49 CFR 172.101)

Shipping Name: UN1760, Corrosive liquids, n.o.s. (Aluminum chloride hydroxide sulfate), 8, PG III

Shipping Symbols: G

Hazard Class: 8

DOT No.: UN1760

Packing Group: III

Label: Corrosive

Packaging Authorizations: a) **Exceptions:** §173.154

b) **Non-bulk Packaging:** §173.203

c) **Bulk Packaging:** §173.241

Quantity Limitations: a) **Passenger, Aircraft, or Railcar:** 5L

b) **Cargo Aircraft Only:** 60L

Special Provisions(172.102): IB3,T7,TP1,TP28: **Vessel Stowage Requirements:** **Vessel Stowage:** A
2008 Emergency Response Guidebook: Page 154

SECTION 14. Other Information

HMIS (scale 0-4): Health: 1 Flammability: 0 Reactivity: 0

The information in this material safety data sheet should be provided to all who will use, handles, store, transport, or otherwise be exposed to this product. This Information has been prepared for the guidance of plant engineering, operations and management and for persons working with or handling this product. Baleco believes this information to be reliable and up to date as of the date of publication, but makes no warranty that it is. Additionally, if this material safety data sheet is more than three years old, you should contact Baleco at The phone number listed in section 1 to make certain that this sheet is current.

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