

MATERIAL SAFETY DATA SHEET

PAGE:	1 of 5
REVISION DATE:	02/11/2008
PRINT DATE:	03/28/2008

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

CLARIFLOC PRXB11 POLYMER

Supplier :

POLYDYNE INC.

PO Box 279

Riceboro, Georgia 31323

Tel : 800-848-7659 Fax : 912-884-8770

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation : Water and Wastewater Treatment Coagulant/Flocculant

Identification of the substance : Aluminum chloride hydroxide, aqueous solution

Chemical Name	CAS-No	Weight %
Polydiallyldimethylammonium chloride (Polydadmac)	26062-79-3	25-35
Aluminum chloride hydroxide		65-75

3. HAZARDS IDENTIFICATION

May cause skin, eye, and respiratory irritation. Do not breath vapors or mist. Spills produce extremely slippery surfaces. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Inhalation : Move to fresh air.

Skin contact : Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes If eye irritation persists, consult a specialist.

Ingestion : Get medical assistance. Give large amounts of water or milk. If a person vomits when lying on his back, turn over on his side. Keep airway clear. Never give anything by mouth to an unconscious person. Aluminum soluble salts may cause gastroenteritis if ingested.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : water spray, foam, carbon dioxide (CO2), dry powder.

Protective equipment for firefighters : Firefighters should wear a self contained breathing apparatus (SCBA) and full protective clothing when responding to an emergency situation..

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions :** Use personal protective equipment (See section 8).
- Environmental precautions :** Do not contaminate water.
- Methods for cleaning up :** Dam up. For small spills use soda ash or lime to neutralize, caution: may generate CO₂ gas. . Soak up with absorbent material. Shovel or sweep up. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

- Handling :** Avoid contact with skin and eyes. Use personal protective equipment (See section 8). Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. Product may slowly corrode iron, brass, copper, aluminum and mild steel.
- Storage :** Keep in a dry, cool place (0 - 35°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Exposure guidelines :** soluble aluminum salts (8-hrTLV) : 2mg/m³ as Al (ACGIH). PEL: 15 mg/m³ (total dust), 5 mg/m³ respirable fraction.
- Personal protection equipment**
- **Respiratory protection :** Not required; except in case of aerosol formation or if exceed exposure limits.
 - **Hand protection :** Rubber gloves
 - **Eye protection :** Safety glasses with side-shields. Do not wear contact lenses.
 - **Skin protection :** Chemical resistant apron or protective suit.
- Hygiene measures :** Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form :** liquid
- Color :** Clear to slightly hazy, colorless to yellow liquid
- Odor :** slight
- pH :** 3.5 - 4.5
- Freezing point (°C) :** -7 C (19 F)
- Boiling point/range (°C) :** ~ 104 (~ 220 F)

CLARIFLOC PRXB11 POLYMER

PAGE:	3 of 5
REVISION DATE:	02/11/2008
PRINT DATE:	03/28/2008

Flash point (°C) :	Not applicable.
Autoignition temperature (°C) :	Not applicable.
Bulk density :	10.3-10.5 lbs/gal @ 25C; Specific gravity: 1.236-1.256
Water solubility :	completely soluble
Viscosity (mPa s) :	250 - 350 cps

10. STABILITY AND REACTIVITY

Stability :	Product is stable. No hazardous polymerization will occur..
Conditions to avoid :	strong bases
Hazardous decomposition products :	Thermal decomposition may release hazardous gases as aluminum, chlorine, and hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

- **Oral :** LD50/oral/rat > 2000 mg/kg (Polydadmac)
- **Dermal :** 150 mg/3D-I (human): mild irritation effects
- **Inhalation :** Inhalation of vapors in high concentration may cause irritation of respiratory system

Irritation

- **Skin :** May cause skin irritation, especially after prolonged or repeated contact
- **Eyes :** Direct eye contact may cause irritation, redness and swelling. Prolonged exposure to aluminum salts may cause conjunctivitis.

Other information : Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Prolonged exposure may aggravate existing skin, eye and lung conditions. Persons with kidney disorders have an increased risk from exposure based on general information found on aluminum salts.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

The product is rapidly eliminated from the aquatic medium through irreversible adsorption onto suspended matter (sludge, clays, humic and other organic acids) and abiotic degradation (hydrolysis). The degradation products are practically non-toxic to aquatic organisms and present no danger to the environment.

CLARIFLOC PRXB11 POLYMER

PAGE:	4 of 5
REVISION DATE:	02/11/2008
PRINT DATE:	03/28/2008

- **Fish** LC50(48 hr, static)(Cerio Daphnia dubia): 6.0 mg/L (ACH)
LC50/Danio rerio/96 hr > 10 mg/L (OECD 203) (Polydadmac)
- **Algae :** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
- **Daphnia :** EC50/Daphnia magna/48 hr > 10 mg/L (OECD 202)
- Bioaccumulation :** Does not bioaccumulate.
- Persistence / degradability :** Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

- Waste from residues / unused products :** In accordance with federal, state and local regulations.
- Contaminated packaging :** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

14. TRANSPORT INFORMATION

Not regulated by DOT /IATA/IMO.

15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.

- RCRA status :** Not a hazardous waste.
- Hazardous waste number :** Not applicable
- Reportable quantity (40 CFR 302) :** Not applicable
- Threshold planning quantity (40 CFR 355)** Not applicable

CLARIFLOC PRXB11 POLYMER

PAGE:	5 of 5
REVISION DATE:	02/11/2008
PRINT DATE:	03/28/2008

HMIS & NFPA Ratings	HMIS	NFPA
Health :	1	1
Flammability :	0	0
Reactivity :	0	0
Personal Protection/Special :	B	

16. OTHER INFORMATION

Person to contact : Regulatory Affairs Manager

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

