



SAFETY DATA SHEET

According to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: **CLARIFLOC™ PRXB11**

Type of product: Mixture.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Processing aid for industrial applications.

Uses advised against: None.

1.3. Details of the supplier of the safety data sheet

Company: POLYDYNE INC
1 Chemical Plant Road
PO BOX 279
Riceboro, GA 31323

Telephone: 1-800-848-7659

Telefax: (912)-884-8770

E-mail address: -

1.4. Emergency telephone number

24-hour emergency number: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to paragraph (d) of 29 CFR 1910.1200:

Not classified.

2.2. Label elements

Labelling according to paragraph (f) of 29 CFR 1910.1200:

Hazard symbol(s): None.

Signal word: None.

Hazard statement(s): None.

Precautionary statement(s): None.

2.3. Other hazards

None.

For explanation of abbreviations see Section 16.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable, this product is a mixture.

3.2. Mixtures

Hazardous components

Aluminum chloride hydroxide

Concentration/ -range: 10 - 60%

CAS Number: 12042-91-0

Classification according to paragraph (d) of 29 CFR 1910.1200: Not classified as hazardous but subject to occupational exposure limit.

For explanation of abbreviations see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. No hazards which require special first aid measures.

Skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of persistent skin irritation, consult a physician.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Alternatively, rinse immediately with Diphoterine ®. Get prompt medical attention.

Ingestion:

Rinse mouth with water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

None under normal use.

Other information:

None.

SECTION 5: Firefighting measures*5.1. Extinguishing media**Suitable extinguishing media:*

Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder.
Warning! Spills produce extremely slippery surfaces.

Unsuitable extinguishing media:

None known.

*5.2. Special hazards arising from the substance or mixture**Hazardous decomposition products:*

Carbon oxides (CO_x). Nitrogen oxides (NO_x). Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

*5.3. Advice for firefighters**Protective measures:*

Wear self-contained breathing apparatus and protective suit.

Other information:

Spills produce extremely slippery surfaces.

SECTION 6: Accidental release measures*6.1. Personal precautions, protective equipment and emergency procedures**Personal precautions:*

Do not touch or walk through spilled material. Spills produce extremely slippery surfaces.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection).

Emergency procedures:

Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

6.2. Environmental precautions

Do not contaminate water.

6.3. Methods and material for containment and cleaning up

Small spills:

Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Large spills:

Do not flush with water. Dam up. Clean up promptly by scoop or vacuum.

Residues:

Soak up with inert absorbent material. After cleaning, flush away traces with water.

6.4. Reference to other sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 13: Disposal considerations;

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Renders surfaces extremely slippery when spilled. When using, do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material. Incompatible with strong bases and oxidizing agents.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Aluminum chloride hydroxide

OSHA: 2 mg/m³ (8 hours) (expressed as aluminium)

ACGIH: 1 mg/m³ (8 hours) (respirable) (expressed as aluminium)

8.2. Exposure controls

Appropriate engineering controls:

Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Individual protection measures, such as personal protective equipment:

a) Eye/face protection:

Safety glasses with side-shields.

b) Skin protection:

i) *Hand protection:* PVC or other plastic material gloves.

ii) *Other:* Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur.

c) Respiratory protection:

No personal respiratory protective equipment normally required.

d) Additional advice:

Wash hands and face before breaks and immediately after handling the product. Wash hands before breaks and at the end of workday.

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties*9.1. Information on basic physical and chemical properties*

<i>a) Appearance:</i>	Clear to slightly yellow liquid.
<i>b) Odour:</i>	None.
<i>c) Odour Threshold:</i>	Not applicable.
<i>d) pH:</i>	2 - 5 (See Technical Bulletin or Product Specifications for a more precise value, if available)
<i>e) Melting point/freezing point:</i>	< 0°C
<i>f) Initial boiling point and boiling range:</i>	> 100°C
<i>g) Flash point:</i>	Does not flash.
<i>h) Evaporation rate:</i>	No data available.
<i>i) Flammability (solid, gas):</i>	Not applicable.
<i>j) Upper/lower flammability or explosive limits:</i>	Not expected to create explosive atmospheres.
<i>k) Vapour pressure:</i>	2.3 kPa @ 20°C
<i>l) Vapour density:</i>	0.804 g/L @ 20°C
<i>m) Relative density:</i>	1.3 - 1.4
<i>n) Solubility(ies):</i>	Completely miscible.
<i>o) Partition coefficient n-octanol/water (log value):</i>	< 0
<i>p) Autoignition temperature:</i>	Does not self-ignite (based on the chemical structure).

q) Decomposition temperature:	> 150°C
r) Viscosity:	See Technical Bulletin.
s) Kinematic viscosity:	No data available.
t) Explosive properties:	Not expected to be explosive based on the chemical structure.
u) Oxidizing properties:	Not expected to be oxidising based on the chemical structure.
v) Particle characteristics:	No data available.

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

Incompatible with strong bases and oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x). Hydrogen cyanide (hydrocyanic acid).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity: LD50/oral/rat > 5000 mg/kg (Estimated)

Acute dermal toxicity: LD50/dermal/rat > 5000 mg/kg. (Estimated)

<i>Acute inhalation toxicity:</i>	Testing by the inhalation route is inappropriate because exposure of humans via inhalation is unlikely: the substance has no vapour pressure and there is practically no exposure to inhalable aerosols.
<i>Skin corrosion/irritation:</i>	Non-irritating to skin.
<i>Serious eye damage/eye irritation:</i>	Slightly irritating.
<i>Respiratory/skin sensitisation:</i>	Not sensitizing to skin. No respiratory sensitization has been observed in the workplace.
<i>Mutagenicity:</i>	By analogy with similar products, this product is not expected to be mutagenic.
<i>Carcinogenicity:</i>	By analogy with similar substances, this substance is not expected to be carcinogenic.
<i>Reproductive toxicity:</i>	By analogy with similar substances, this substance is not expected to be toxic for reproduction.
<i>STOT - Single exposure:</i>	No known effects.
<i>STOT - Repeated exposure:</i>	No known effect.
<i>Aspiration hazard:</i>	No hazards resulting from the material as supplied.

Relevant information on the hazardous components:

Aluminum chloride hydroxide

<i>Acute oral toxicity:</i>	LD50/oral/rat = 9187 mg/kg (OECD 401)
<i>Acute dermal toxicity:</i>	LD50/dermal/rat > 2000 mg/kg. (OECD 402)
<i>Acute inhalation toxicity:</i>	The product is not expected to be toxic by inhalation.
<i>Skin corrosion/irritation:</i>	Not irritating. (OECD 404)
<i>Serious eye damage/eye irritation:</i>	Not irritating. (OECD 405)
<i>Respiratory/skin sensitisation:</i>	Not sensitizing. (OECD 406)
<i>Mutagenicity:</i>	Did not show mutagenic effects in animal experiments. (OECD 474) By analogy with similar products, this product is not expected to be mutagenic. (OECD 471, 476, 487)
<i>Carcinogenicity:</i>	Based on the absence of mutagenicity, it is unlikely that the substance is carcinogenic.

<i>Reproductive toxicity:</i>	Based on available data, product is not expected to be toxic for reproduction. NOAEL/rat = 1000 mg/kg/day (OECD 422) (Based on results obtained from tests on analogous products) By analogy with similar substances, this substance is not expected to be toxic for reproduction. (OECD 426, 452)
<i>STOT - Single exposure:</i>	No known effects.
<i>STOT - Repeated exposure:</i>	Based on available data, product is not expected to demonstrate chronic toxic effects. NOAEL/oral/rat = 1000 mg/kg/day (OECD 422) (Based on results obtained from tests on analogous products) LOAEC/inhalation/2160 h/rat = 15.3 mg/m ³ (OECD 413)
<i>Aspiration hazard:</i>	No known effects.

SECTION 12: Ecological information

12.1. Toxicity

Information on the product as supplied:

<i>Acute toxicity to fish:</i>	LC50/Danio rerio/96 hours > 100 mg/L (Estimated)
<i>Acute toxicity to invertebrates:</i>	EC50/Daphnia magna/48 hours > 100 mg/L (Estimated)
<i>Acute toxicity to algae:</i>	Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
<i>Chronic toxicity to fish:</i>	No data available.
<i>Chronic toxicity to invertebrates:</i>	No data available.
<i>Toxicity to microorganisms:</i>	No data available.
<i>Effects on terrestrial organisms:</i>	No data available.
<i>Sediment toxicity:</i>	No data available.

Relevant information on the hazardous components:

Aluminum chloride hydroxide

<i>Acute toxicity to fish:</i>	LC50/Danio rerio/96 hours > 100 mg/L (OECD 203)
<i>Acute toxicity to invertebrates:</i>	EC50/Daphnia magna/48 hours > 200 mg/L (OECD 202)
<i>Acute toxicity to algae:</i>	IC50/Pseudokirchneriella subcapitata/72 hours = 0.644 mg/L (OECD 201) (Based on results obtained from tests on analogous products)

<i>Chronic toxicity to fish:</i>	NOEC/Fish/7 days = 56.48 mg/L (Based on results obtained from tests on analogous products)
<i>Chronic toxicity to invertebrates:</i>	No data available.
<i>Toxicity to microorganisms:</i>	EC10/activated sludge/3 hours > 1000 mg/L (OECD 209) (Based on results obtained from tests on analogous products)
<i>Effects on terrestrial organisms:</i>	No data available.
<i>Sediment toxicity:</i>	No data available.

12.2. Persistence and degradability

Information on the product as supplied:

<i>Degradation:</i>	Not readily biodegradable.
<i>Hydrolysis:</i>	Does not hydrolyse.
<i>Photolysis:</i>	No data available.

Relevant information on the hazardous components:

Aluminum chloride hydroxide

<i>Degradation:</i>	Not relevant (inorganic).
<i>Hydrolysis:</i>	Does not hydrolyse.
<i>Photolysis:</i>	No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:

The product is not expected to bioaccumulate.

<i>Partition co-efficient (Log Pow):</i>	< 0
<i>Bioconcentration factor (BCF):</i>	~0

Relevant information on the hazardous components:

Aluminum chloride hydroxide

<i>Partition co-efficient (Log Pow):</i>	Not applicable.
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Bioconcentration factor (BCF): No data available.

12.4. Mobility in soil

Information on the product as supplied:

Exposure to soil is not to be expected.

Relevant information on the hazardous components:

Aluminum chloride hydroxide

Koc: No data available.

12.5. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:

Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, dispose of in compliance with local regulations.

Recycling:

Store containers and offer for recycling of material when in accordance with the local regulations.

SECTION 14: Transport information

Land transport (DOT)

Not classified.

Sea transport (IMDG)

Not classified.

Air transport (IATA)

Not classified.

SECTION 15: Regulatory information*15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture*Information on the product as supplied:TSCA Chemical Substances Inventory:

All components of this product are either listed as active on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:
Not concerned.

SARA Title III Sections:

Section 302 (TPO) - Reportable Quantity:
Not concerned.

Section 304 - Reportable Quantity:
Not concerned.

Section 313 (De minimis concentration):
Not concerned.

Clean Water Act

Section 311 Hazardous Substances (40 CFR 117.3) - Reportable Quantity:
Not concerned.

Clean Air Act

Section 112(r) Accidental release prevention requirements (40 CFR 68) - Reportable Quantity:
Not concerned.

CERCLA

Hazardous Substances List (40 CFR 302.4) - Reportable Quantity:
Not concerned.

RCRA status :

Not RCRA hazardous.

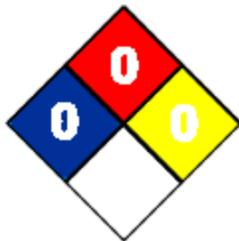
California Proposition 65 Information:

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Epichlorohydrin, 1,3-Dichloro-2-propanol (1,3-DCP), 3-Monochloropropane-1,2-diol (3-MCPD)

SECTION 16: Other informationNFPA and HMIS Ratings:

NFPA:

Health: 0
Flammability: 0
Instability: 0



HMIS:

Health: 0
Flammability: 0
Physical Hazard: 0
PPE Code: B

This data sheet contains changes from the previous version in section(s):

SECTION 5. Fire-fighting measures, SECTION 15. Regulatory information, SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet:Acronyms

STOT = Specific target organ toxicity

Training advice:

Do not handle until all safety precautions have been read and understood.

This SDS was prepared in accordance with the following:

U.S. Code of Federal Regulations 29 CFR 1910.1200

Version: 16.01.b

LDMS175

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.

