

MATERIAL SAFETY DATA SHEET

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Chemical Family: Anionic Polyacrylamide

I. IDENTIFICATION OF THE SUBSTANCE

Trade Name – Unifloc 178
Chemical Family - anionic polyacrylamide

II. HAZARD IDENTIFICATION

Statement of Hazard: Warning: *CAUTION – SPILLS ARE EXTREMELY SLIPPERY.*
Potential Health Effects: Exposure: The acute oral (rat) LD₅₀/>5000 mg/kg. Acute Dermal (rabbit)/LD₅₀/Non-toxic even at high dose levels. The product is not expected To be toxic by inhalation.

III. COMPOSITION OF INGREDIENTS

Identification: Anionic polyacrylamide in water-in-oil emulsion/flocculant.

Ingredients	CAS #	Approx. Wt.	OSHA (PEL)
Distillates (petroleum), Hydro-treated light	64742-47-8	20 – 25 %	500 ppm 1200 mg/m ³ (skin)165 ppm

IV. FIRST AID MEASURES

Skin: Remove contaminated clothing. Wash exposed area with soap & water for at least 15 minutes. Launder contaminated clothing before reuse. Call physician at once if rash or other symptoms develop or if symptoms of overexposure appear.
Eyes: Immediately flush with water for at least 15 minutes while holding eyelids open. In case of persistent eye irritation, seek medical attention.

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IV. FIRST AID MEASURES CONTINUED

Inhalation: Ventilate the area. Move patient to fresh air. If symptoms; seek medical Attention.

Ingestion: The product is not considered toxic based on studies on laboratory animals.

V. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Foam, water, water spray, dry powder, chemical powders, &/or carbon dioxide (CO₂) according to the materials involved in the fire.

Special Fire-Fighting Precautions: Spills produce extremely slippery surfaces.

Protective Equipment for Firefighters: Firefighters, and others exposed, should wear self-contained breathing apparatus. (See MSDS Section VIII "Exposure Controls/ Personal Protection".

41. ACCIDENTAL RELEASE MEASURES

Personal Safety Measures: Use safe chemical handling practices. No special precautions required.

Methods for cleaning up: CAUTION – SLIP HAZARD. Do not flush with water. Moak up with inert absorbent material and scoop up; if slipperiness remains apply more dry-sweeping compound. If liquid has been spilled in large quantities, clean up promptly by scoop or vacuum. Prevent it from entering into a drainage system with sand or earth. Recover the product for re-use, if possible, or for elimination. Send the product to an authorized waste treatment plant in compliance with Federal, State and Local regulations. AFTER the product has been recovered rinse the area & materials Involved with water.

VI. HANDLING AND STORAGE

Handling: Use safe chemical handling practices. Avoid contact with skin and eyes. Avoid inhalation of the vapors. When handling the working solution ensure there is adequate ventilation. When using do not smoke, eat, or drink. Use safe chemical handling practices.

Storage: Store the closed container in a well-ventilated area and keep in a dry, cool place (0-30 degrees C.) When preparing the working solution ensure there is adequate ventilation. Freezing will affect the physical condition and may damage the material. Do not pressurize or heat the containers. Avoid extremes of temperature: store between 41-86 degrees F (5-30 degrees C). Keep containers away from heating sources & fire. Do not use iron, copper or aluminum containers or equipment to avoid product degradation. When storing use plastic containers.

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VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Natural ventilation is adequate in absence of mists.

Respiratory protection – Where exposures are below the established limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

Skin protection - Wear light protective clothing.

Protection for Hands: Use protective gloves that provide comprehensive protection (i.e. PVC, Neoprene, or Rubber).

Eye protection - Use close fitting safety goggles and/or visor. Eyewash equipment and safety shower should be provided in areas of potential exposure.

Hygiene measures- Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practices.

IX. PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance:	Cloudy, near colorless liquid.
Form:	Viscous liquid.
Color:	Milky.
Odor:	Aliphatic.
Solution pH:	6-8 @ 5g/l
Solubility:	Soluble – solubility limited by viscosity.
Melting point:	Not applicable.
Flash point:	Does not flash.
Autoignition Temperature:	Does not ignite.
Vapor pressure (mm Hg):	N/A
Specific Gravity:	1.05

X. STABILITY AND REACTIVITY

Stability: Under normal conditions the product is stable. Keep away from overheating and ignition sources.

Substances to Avoid: Strong oxidizing agents and strong reducing agents as it may cause exothermic reactions. This material reacts slowly with iron, copper and aluminum, resulting in corrosion and product degradation.

Hazardous Decomposition Products: If properly stored no hazardous decomposition may occur. Thermal decomposition may produce carbon oxides, nitrogen oxides (NOx).

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XI. TOXICOLOGICAL INFORMATION

The concentration of each substance should be considered when assessing the toxicological effects deriving from the preparation.

Acute Toxicity:

- Oral** LD 50/oral/rat>5000 mg/kg.
Dermal: The product is not expected to be toxic by inhalation.
Inhalation: Thermal decomposition may produce carbon oxides, nitrogen oxides (NOx).

Irritation:

- Skin:** May cause skin irritation with susceptible persons.
Eyes: May cause eye irritation with susceptible persons.
Sensitization: The product is not expected to be sensitizing.
Chronic Toxicity: Prolonged skin contact may defat the skin and produce dermatitis.

XII. ECOLOGICAL INFORMATION

The aquatic toxicity is highly mitigated by the presence of dissolved organic carbon in the water. Results obtained using the US EPS "Dirty Water" test show that irreversible adsorption into suspended matter & dissolved organics (such as humic & other organic acids) present in natural waters, reduces the toxicity to aquatic organisms by a factor of over 10. Acute toxicity tests conducted using environmentally representative water gave the following results:

- Fish:** LC50//96h>100 mg/l (OECD 203).
Algae: IC50/Scenedesmus subspicatus/72hr>100 mg/l (OECD 201)
Daphnia: EC50/48 hours>100 mg/l (OECD 202).
Does not hydrolyze. Not readily biodegradable.

XIII. DISPOSAL CONSIDERATION

Waste from residues/ unused products: In accordance with federal, state and local regulations.

Recover if possible, in doing so; comply with all Federal, State & Local regulations.

XIV. TRANSPORT INFORMATION

Not regulated by D. O. T.

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XV. REGULATORY INFORMATION

All components of this product are on the TSCA or are not required to be listed on the TSCA Chemical Inventory.

RCRA Status: Not a hazardous waste.

Hazardous Waste Number: Not applicable.

Reportable Quantity (40 CFR 302): Not applicable.

Threshold Planning Quantity (40 CFR 335): Not applicable.

Product Hazard Classification Sara 311 – N/A

HMIS & NFPA Rating:	HMIS	NFPA
Health:	1	1
Flammability:	1	1
Reactivity:	0	0

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