AQUABOND
Chemistry for Tomorrow

Technical Data Sheet

Aqua Floc

Product Description

Aqua Floc™ is an ultra-high-molecular-weight anionic polyacrylamide designed for superior flocculation performance across municipal, industrial, mining, food & beverage, pulp & paper, and oil & gas applications. Its long-chain structure provides exceptional bridging capability, forming large, dense, and drainable flocs when used after coagulation with Aqua PAC.
Aqua Floc is part of ABI's Dual-Phase Water Treatment System, offering improved robustness, stronger floc formation, and enhanced dewatering efficiency.

Key Features

Ultra-high-MW anionic PAM
Exceptional bridging and fines-capture performance
Rapid formation of strong, dense macroflocs
Compatible with all coagulants, especially Aqua PAC
Improves sludge dryness and reduces disposal costs
Effective across all water and wastewater industries

Typical Applications

Municipal wastewater treatment
Drinking water clarification
Industrial wastewater (dyes, metals, emulsions)
Mining & mineral processing (tailings, clay fines)
Food & beverage (FOG, proteins, sugars)
Pulp & paper (fiber capture, fines removal)
Oil & gas / petrochemical (emulsions, tank bottoms)

How Aqua Floc Works

Aqua Floc uses ultra-long PAM polymer chains to physically bridge microflocs formed during coagulation. This bridging mechanism produces strong, resilient macroflocs that settle quickly, thicken efficiently, and dewater effectively. Aqua Floc is engineered to perform optimally in ABI's Dual-Phase Treatment System following Aqua PAC.

Recommended Use

Aqua Floc must be applied after coagulation with Aqua PAC. Jar testing is required to determine optimal dosage for each application.

Polymer Solution Preparation

Prepare a 0.05–0.1% solution of Aqua Floc
Add powder slowly to water
Mix gently to avoid shear
Hydrate for 30–60 minutes before use

AQUABOND
Chemistry for Tomorrow

Technical Data Sheet

Aqua Floc

6. Dosage Guidelines (Starting Points)

Industry	Typical Range (mg/L)	Notes
Municipal Drinking Water	0.1–0.5	For added floc strength
Municipal Wastewater	1–5	Improves sludge dewatering
Industrial Wastewater	2–10	For dyes, metals, emulsions
Food & Beverage	1–4	Effective with fats & proteins
Mining / Mineral Processing	5–20	High solids; strong bridging
Pulp & Paper	2–8	Fiber capture & fines removal
Oil & Gas / Petrochemical	3–12	Oily solids & tank bottoms

(Final Dosage must be determined by Jar Testing)

7. Use Instructions

Prepare a 0.05–0.1% polymer solution.
Mix gently to avoid polymer degradation.
Add Aqua Floc after Aqua PAC coagulation.
Optimize dosage via jar testing.

8. Safety & Handling

Avoid inhalation of dust.
Use gloves and eye protection.
Store in sealed packaging to prevent moisture absorption.
Refer to SDS for full safety details.

9. Compatibility

Aqua Floc is compatible with:
Aqua PAC
Aluminum-based coagulants
Ferric coagulants
Most organic coagulants

10. Summary

Aqua Floc is an ultra high-performance anionic flocculant designed to improve robustness, stronger floc formation, enhance dewatering efficiency, and superior overall water-treatment efficiency with cost savings when used after Aqua PAC.