



FRA9000 Membrane System Flocculant

FRA9000 Membrane System Flocculant is a high-performance polymeric organic flocculant applicated exclusive for pretreatment stages in membrane-based water treatment. Leveraging dual mechanisms of charge neutralization and adsorption bridging, it efficiently aggregates colloidal particles, suspended solids, and macromolecular organics, significantly enhancing multimedia filter retention efficiency and reducing feedwater Silt Density Index (SDI). As a critical frontline defense for RO systems, FRA9000 is widely deployed across textile dyeing, food & beverage, biopharmaceutical, and fine chemical industries—ensuring long-term membrane stability, minimizing fouling risks, and optimizing operational economics.

Product Features

- ❖ **High-Efficiency Agglomeration:** Rapidly forms dense flocs to maximize colloidal and organic removal; effectively maintains feedwater SDI <5.
- ❖ **Precision Dosing Protocol:** Designed for injection upstream of multimedia filters; physically isolated from scale inhibitor dosing points (pre-cartridge filter) to prevent cross-reaction.
- ❖ **System Compatibility:** Stable with standard pretreatment chemicals; verified safe for all composite RO membrane systems with no residue risk.
- ❖ **Operational Convenience:** Liquid formulation; typical dilution 1–2%; compatible with automated dosing systems for efficient field preparation.
- ❖ **Proven Industrial Application:** Demonstrated excellence in high-turbidity and high-organic-load feedwaters with extensive field success records.
- ❖ **Safety & Environmental Compliance:** Low-toxicity formula; reaction byproducts are readily treatable per industrial safety and environmental standards.

Physicochemical Properties

The following represent typical properties of FRA9000 for reference only and are not guaranteed supply specifications.

Refer to official technical documentation for certified data.

Item	Index
Appearance	Colorless to light amber transparent liquid
pH (2% aqueous solution)	5.0–7.0
Density (21°C) (g/cm ³)	1.05–1.15

*For specialized applications or customized solutions, please contact FFM Inc. directly.



Instructions for Use

- ❖ **Dosing Location & Method:** Must be injected upstream of the multimedia filter to ensure complete flocculation. Typical dilution: 1–2%; recommended dosage: 2–10 ppm (as neat product), adjusted based on feedwater turbidity and SDI.
- ❖ **Critical Precaution:** Flocculant and scale inhibitors/dispersants may carry opposing charges; direct mixing in-system can cause precipitation and severe membrane fouling. Strictly maintain physical separation between flocculant dosing (pretreatment stage) and scale inhibitor dosing (RO feed stage). Consult technical engineers for system-specific dosing design. Prepare diluted solution fresh daily.

Packing and Storage

25 kg plastic drums; custom packaging available upon request. Store in a cool, well-ventilated area away from ignition sources, heat, direct sunlight, moisture, and physical impact.

Shelf Life

24 months.

Precautions

Wear protective gloves and goggles during operation. Avoid skin/eye contact. In case of any contact, rinse with ample water immediately for at least 15 minutes; seek medical attention if irritation persists.