



FRA8010 Membrane System Alkaline Cleaning Agent

FRA8010 Membrane System Alkaline Cleaning Agent is a high-efficiency solution specifically applied for chemical cleaning of reverse osmosis membrane systems, targeting oil residues, organic contaminants, and biofilms. Through synergistic alkaline hydrolysis and dispersion mechanisms, it gently removes surface deposits while preserving membrane integrity, rapidly restoring flux and salt rejection performance. Ideal for routine maintenance and deep cleaning across diverse water treatment applications, FRA8010 — when applied with standardized protocols — significantly extends membrane service life and ensures consistent product water quality, serving as an essential component in the full lifecycle management of membrane systems.

Product Features

- ❖ **Universal Membrane Compatibility:** Safe for all major aromatic polyamide and cellulose acetate membranes with zero corrosion risk.
- ❖ **Targeted Contaminant Removal:** Effectively decomposes oils, proteins, polysaccharides, and biofilms to maximize flux recovery.
- ❖ **Flexible Cleaning Protocol:** Liquid formulation enables rapid dissolution; supports combined circulation and soaking modes for light to severe fouling.
- ❖ **Precise Parameter Control:** Maintain cleaning solution pH at 10.5 ± 0.5 ; optimal efficacy at 30–40°C (do not exceed 45°C).
- ❖ **Safety & Eco-Friendly:** Biodegradable alkaline formula with clear operational guidelines to minimize safety and environmental risks.
- ❖ **Cost-Effective:** Recommended 10% dilution ratio ensures precise usage and superior cost performance.

Physicochemical Properties

The following represent typical properties of FRA8010 for reference only and are not guaranteed supply specifications.

Refer to official technical documentation for certified data.

| Item | Index |
|-------------------------------------|--------------------------|
| Appearance | Amber transparent liquid |
| pH (1% aqueous solution, 20°C) | 10.0–12.0 |
| Density (20°C) (g/cm ³) | 1.05–1.15 |

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

Instructions for Use



❖ Dilution Ratio:

- Dilute to 10% of total cleaning solution volume (cleaning agent:water = 1:9).

❖ Cleaning Procedure:

- Inspect cleaning tank, piping, and cartridge filter; replace cartridges if needed.
- Fill tank with RO permeate.
- Slowly add FRA8010; circulate with cleaning pump. Measure pH; adjust to 10.5 ± 0.5 using NaOH if required.
- Circulate 1–10 hours (based on fouling severity); for heavy fouling, pre-soak before circulating. Monitor turbidity, color, and flocculent formation.
- For severe contamination, drain initial solution to prevent redeposition; prepare fresh solution for secondary cleaning.
- Elevate temperature to 30–40°C during circulation to enhance efficacy (strictly $\leq 45^\circ\text{C}$); monitor continuously.

Packing and Storage

Packaged in 25 kg plastic drums. Store in a cool, dark place at room temperature.

Shelf Life

12 months.

Precautions

Alkaline product. Wear PPE (gloves, goggles). Avoid skin/eye contact. Rinse immediately with ample water if contact occurs; seek medical attention if irritation persists.