



Optimum FlowTM

Antiscalant/Dispersant/Antifoulant

Membrane System Support Program

Protec ROTM

United States Patent

Protec ROTM is a highly effective antifoulant, specially formulated for feedwaters with the highest potential for fouling by colloidal particles and organic matter. It is effective over a wide range of concentrations. Use of this product is recommended for reducing the operating and capital costs of reverse osmosis (RO), nanofiltration (NF) and ultrafiltration (UF) systems. A special utility of Protec ROTM is in its application as an anti-deposition agent for silt and colloidal organic matter in natural sea and brackish surface waters. Protective, and flux-enhancing activity reduces the rate of fouling, and enhances the ease of subsequent cleanings. These properties are useful in product concentrations and water reclamation applications.

Product Benefits:

- **Inhibits deposition of organic colloidal particles.**
- **Certified under ANSI/NSF Standard 60 for drinking water production.**
- **Compatible with major manufacturers' RO, NF, and UF membranes.**
- **Moderate antiscalant activities combined with particulate control makes it an ideal antifoulant for sea, river, and lake waters.**
- **Inhibits anchoring of microorganisms on membrane surfaces.**
- **Environmentally friendly dispersant. Food-grade additive.**

Specification: Liquid

Appearance:	Clear, straw colored solution.
pH:	5.2± 1.2
Specific Gravity:	1.028 ± 0.015

Specification: Powder

Appearance:	Yellow Power
pH (1% in water):	Approx. 5

Application:

Protec ROTM should be injected into the feed-stream prior to the static mixer and cartridge filter. Effective pH range is 4 –12. If frozen, liquid or solutions may be thawed and mixed before use. Stability is >2 years, excellent, but best used within 12 months.

Dosing Recommendations:

In the useful dosage range of 1 –100 mg/L (liquid), and 0.1 – 10 mg/L (powder), the liquid being 10% w/w of the powder in water plus a preservative. By monitoring the concentrate stream and trend charts, optimal dosage can be achieved for the control of colloidal particles in feedwaters of microbial, plant or inorganic sources, and organic compounds in industrial process or waste streams. For concentrations of food products, Protec-ROTM is acceptable as an additive.

Packaging:

Powder: 50 lbs., Custom sizes
Liquid: Custom sizes, drums and totes.

**MSDS available upon request.*
