



Technical Data Sheet

Advanced industrial
Antiscalant Solution
BR7000 Plus

BR7000 Plus

Description

BR7000 Plus is a scaling and corrosion inhibitor specially designed for seawater and brackish water reverse osmosis plants.

- General antiscalant with a synergetic mixture of organic polymers.
- Controls inorganic scales of carbonate, sulfate, silica, and metal oxides.
- Compatible with all major RO membranes.

Highly effective liquid antiscalant specially formulated for sea and brackish water RO systems with feed TDS up to 30,000 ppm.

Applications

- Desalination plants (seawater / brackish water).
- Drinking water production via RO systems.
- Industrial water treatment (cooling, food & beverage, power plants).
- Prevents scale from CaCO_3 , CaSO_4 , BaSO_4 , SrSO_4 , SiO_2 , and iron deposits.

Property	Specification
Physical state	Clear aqueous liquid
Color	Yellowish to orange
pH (concentrated)	< 3
pH-value in aqueous solution (1% w/w)	< 5
Solubility	Completely soluble
Flash point (Pensky/Martens)	> 100 °C
Odor	Mild, characteristic
Density	~ 1.10 g/cm ³ (at 20°C)
Storage stability	36 months in original sealed container
Eye irritation (rabbits)	Strong irritant
Packaging	Standard packaging: 25 kg container

Handling & Safety

- Avoid contact with skin and eyes.
- Wash hands thoroughly after handling, especially before eating, drinking, or smoking.
- Use appropriate PPE (gloves, goggles, protective clothing).

Use & Dosage

- Usage Scaling & Corrosion Inhibitors for sea and brackish Water Reverse Osmosis plants. General Antiscalant with synergetic mixture of organic polymer adapted for controlling inorganic scales of carbonate, sulfate, silica and metal oxide in Brackish and sea water BR7000 Plus is compatible with all major RO-membranes
- Conventional indices (Langelier, Stiff-Davis, Odde-Tomson, Ryznar) predict scaling based on thermal saturation, assuming all ions freely react. In practice:
- Membrane salt deposition differs from simple thermal models.
- Ion interactions in brackish water cause complex fouling, not captured by simple indices.
- BR7000 Plus accounts for these factors, preventing scale at cost-effective doses as low as 2 ppm. Exact dosing is calculated from water analysis, system design, and operating parameters. Dosing range: 2–15 ppm, adjustable; can be diluted with RO permeate if required.

Advantages & Benefits

- Extends RO membrane lifespan by preventing scaling.
- Compatible with all types of polyamide and TFC membranes.
- Reduces the need for acid cleaning and minimizes downtime.
- Improves system recovery rates and operational efficiency.
- Reduces OPEX costs in desalination and industrial plants.
- Manufactured according to German standards (ISO certified).

Storage

- Keep containers hermetically sealed.
- Store in a cool, well-ventilated place.