

Antiscalant BR7000 Plus

1. 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

2. Dosage

Conventional methods use simple indices like Langelier, Stiff-Davis, Oddo-Tomson and Ryznar indexes, to predict scale and choose the right antiscalant and dose. These simple indices are driven from the basic concept of saturation under heating in thermal plants or heat exchanger and assume that every ion in the water is available 100% freely as reactant for scale forming. They have two major withdrawals:

- The mechanism of dehydration or dewatering of dissolved salts on membranes surface, differs from the simple thermal saturation modules.
- The interaction between the different ions present in brackish water especially with high salt content leads to sophisticated fouling modules (fouling fractions), which varies in the practice from the simplified assumption, that every ions reacts 100% as it is in the water analysis, using simple indices.

Using these conventional methods leads to errors in projection of scale and in choosing antiscalant and dose.

BR7000 Plus formulas for sea and Brackish Water membrane systems takes into consideration the above mentioned points to predict and prevent scale formation at cost effective dosing rate as low as 2 ppm based on water analysis. we special service to calculate the exact dosing for operations based on water analysis and system design and operating parameters. If the minimum dosing pumps capacity is over the required dose. **BR7000 Plus** can be diluted with RO-Permeate water accordingly.

Dosing rate **2.0-15.0 ppm** depend on feed water analysis.

3. Physical and Chemical Properties

3.1 General Properties

Form clear aqueous, liquid

Color yellowish to orange

3.2 Important Properties to protect health, environment and safety

pH-value (Concentrate) <3

pH-value in aqueous solution (1% w/w) <5

Flash point (Pensky/Martens) °C >100

Solubility in Water (weight %) completely soluble

Eyes Irritation, Rabbits Strong irritant

Antiscalant BR7000 Plus

4. Handling and Storage

4.1 Handling Avoid skin and eye contact. After work wash hands especially before eating, drinking or smoking.

4.2 Storage Keep container hermetically sealed.
Store in a cool and good ventilated area.