

### SupraChem 6406 – Concentrated, Reverse Osmosis Antiscalant

#### Product Description

SupraCHEM 6406 is a concentrated antiscalant with strong carbonate and sulfate inhibition capabilities. It is effective over a wide range of concentrations and does not flocculate dissolved polymers such as residual coagulants or iron- or aluminum-rich silica. A special utility is in its application as a substitute for pretreatment with ion exchange beds. Use of this product is recommended for reducing the operating and capital costs of reverse osmosis (RO) and nanofiltration (NF) systems.

- Specifically formulated to control high concentrations of calcium and other sulfates.
- Controls sulfate scale over a large concentration range
- Strong dispersing capabilities
- Higher performance allows for lower dose rates than existing formulations
- Liquid formulation is convenient and easy to use
- Compatible with RO, NF, and UF membranes from all major manufacturers International potable water approvals

#### Typical Properties

The following are typical properties for SupraCHEM 6406 and should not be regarded as specification limits for the product. A product specification is available on request.

|                             |                          |
|-----------------------------|--------------------------|
| Appearance                  | : clear to yellow liquid |
| pH                          | : $7.0 \pm 0.5$          |
| Specific gravity at 20/20°C | : $1.30 \pm 0.05$        |
| Freezing point range        | : 0 to -15 °C            |

#### Chemical Reactivity

SupraCHEM 6406 is not affected by chlorine or other oxidising biocides under normal conditions of use without only Supracid 300.

SupraCHEM 6406 may be used in membrane systems using chlorine and sodium metabisulphite.

#### Application and Dose Level

SupraCHEM 6406 is an aqueous solution of an organic acid and as such is corrosive in its concentrated form. Corrosion resistant dosing equipment should therefore be used. Examples of suitable materials are 316L stainless steel, or plastics such as GRP, PVC and PE.

The recommended injection point is into the feed stream prior to the static mixer and any cartridge filters.

SupraCHEM 6406 is miscible with water in all proportions. It may be applied as the neat product, or as a solution in permeate. Minimum dosing solution strength of 10% w/w is recommended. SupraCHEM 6406 should be dosed continuously and proportionately to the feed water flow, to maintain the recommended dose level.

The dose level required is dependent on the quality of the feed water and the saturation indices of the various scale forming species present in the concentrated brine.

In the dosage range of 0.1 – 8.0 mg/L (neat), control of a wide range of inorganic scales at several times the conventional saturation values.. By monitoring the concentrate stream and trend charts using Dose Level Projections, optimal dosage can be achieved for the control of scales.

Proprietary computer software is used to calculate scaling indices and calculate optimum system recovery. Dose level projections and recommendations are available on request.

#### Handling

Avoid spilling, skin and eye contact. Observe good chemical hygiene practices.

Please read the label and Material Safety Data Sheet before handling this product.

#### Logistics

Classification Hazardous for transportation, class 8  
Irritating to eyes for supply

Packaging 25 kg (net weight) Plastic drums  
230 kg (net weight) Plastic drums  
1000 kg (net weight) Intermediate bulk containers