

## SupraChem 6403 – Antiscalant for Membrane Systems

### Product Description

SupraChem 6403 is a highly effective synergy liquid antiscalant, specially formulated for water treatment systems using membrane technology. SupraChem 6403 prevents broad spectrum scale in high silica water.

It contains a combination of well-proven agents which prevent crystallization of inorganic silica solutes while protecting membranes from deposition of colloidal particles. Use of this product is recommended for reducing the operating and capital costs of reverse osmosis (RO), nanofiltration (NF) and ultrafiltration (UF) systems.

- Effective in retarding polymerization and precipitation of reactive and non-reactive silica
- Excellent control of carbonate scales, sulphate and fluoride for cost effective operation
- Decreases precipitation of aluminum, iron, and heavy metal salts
- Controls inorganic scale over a large concentration range.
- Compatible with RO, NF, and UF membranes from all major manufacturers. International potable water approvals
- Liquid formulation is safe and easy to use.

### Typical Properties

The following are typical properties for SupraChem 6403 and should not be regarded as specification limits for the product. A product specification is available on request.

Appearance	: clear to yellow liquid
pH	: $9.7 \pm 0.5$
Specific gravity at 20/20°C	: $1.22 \pm 0.05$
Freezing point range	: 0 to -10 °C

### Chemical Reactivity

SupraChem 6403 is not affected by chlorine or other oxidising biocides under normal conditions of use without only Supradic 300.

SupraChem 6403 may be used in membrane systems using chlorine and sodium metabisulphite.

### Application and Dose Level

SupraChem 6403 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 6403 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 6403 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 1–15 mg/L (neat), control of a wide range of inorganic scales at up to 100x saturation values or higher is possible. 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