

# **Product Facts**

### Memprochem 1100 Reverse Osmosis Silica Inhibitor

#### GENERAL PRODUCT INFORMATION

Memprochem 1100 is a multifunctional antiscalant for reverse osmosis systems, highly effective in preventing silica scale formation on membrane surfaces.

Besides its excellent silica scale inhibition properties Memprochem 1100 is effectively controling calcium carbonate, strontium sulphate, barium sulphate, iron oxide and calcium fluoride scale formation.

# PHYSICAL AND CHEMICAL PRODUCT PROPERTIES

The following are typical properties for Memprochem 1100 and should not be regarded as specification limits for the product. A product specification is available on request.

· Appearance : Yellow to slight red

· Odour : Slight

#### PACKAGING INFORMATION

Memprochem 1100 is available in various packages.

### CHEMICAL REACTIVITY

Memprochem 1100 is not affected by chlorine or other oxidising biocides under normal conditions of use. Memprochem 1100 should be injected in membrane systems after chlorine and sodium metabisulphite treatment. Memprochem 1100 is not compatible with residual cationic monomers from the pre-treatment.

#### APPLICATION AND DOSAGE LEVEL

Memprochem 1100 is an aqueous solution of organic acids and is corrosive in its concentrated form. Corrosion resistant dosing equipment must therefore be used. Examples of suitable materials are PVC, glass reinforced plastic or HDPE.

Recommended injection point is into the feed water downstream of any filtration equipment and cartridge filters. Memprochem 1100 is miscible with water in all proportions. It may be applied as the neat product, or as a solution in permeate water. A minimum dosing solution strength of 10% w/w is recommended. Memprochem 1100 should be dosed continuously, and proportionately to the feed water flow, to maintain the recommended dosage level.

The dosage 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.

Recommended operation limits of the most relevant brine water parameters:

Silica: up to 240 ppm

LSI: (+)2-(+)2.5

Dose level projection and optimal system recovery recommendations are available on request.

Important Note: Over and under-dosing may cause membrane fouling so please contact your local. Zion Enviro. Systems representative to define the optimal feed point and dosage rate.

#### Maximum Dilution

Maximum dilution is temperature related as shown below.

Temperature, °C	Maximum Dilution. %
<30	10
30-35	25
>35	50

Dealer / Distributor

