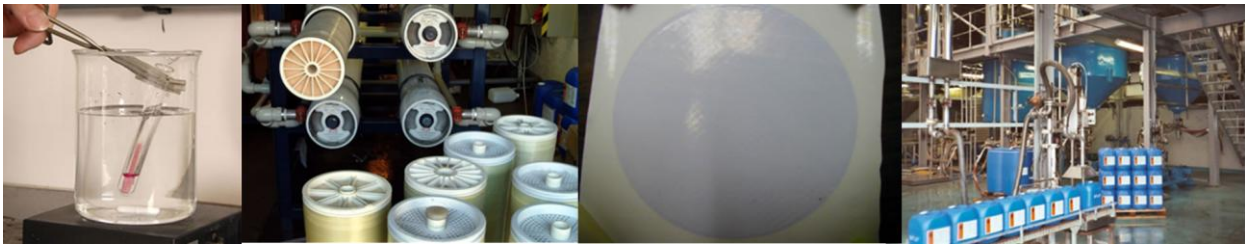


In addition to the main product range Avista Technologies offer a small selection of ancillary products which may be required for efficient operation of a membrane system. These include chlorine scavenger, a salt rejection improvement aid and a range of product line corrosion inhibitors. For hybrid systems a thermal antiscalant is also offered. The products offered are outlined below.



### Chlorine Scavenger

Chlorine may be present in the feedwater to membrane plant, either due to the feed being taken from a municipal supply or because it has been added to reduce biological activity in the pretreatment process. Thin film composite membranes have little tolerance to chlorine and other oxidising agents, and therefore the chlorine must be de-activated. **Anti-Chlor 30** is a 30% solution of Sodium Bisulphite which is used as a Chlorine scavenger. The product addition rate may be calculated using **Avista Advisor 3**.

### Membrane Sizing Agents

Thin film composite membranes may lose some of their rejection characteristics, either through aging or due to oxidation. Liquid and powder resizing agents are available that coat the surface of partially oxidised/damaged thin film membranes and improve salt rejection.

### Corrosion Inhibitors

The permeate from a reverse osmosis plant may often be corrosive to piping systems, as it will have a low hardness level and a low level of alkalinity. In the case of permeate from a seawater plant, the level of chloride will be disproportionately high. Corrosion may be prevented by applying a suitable inhibitor. The **ViCoat** range includes products based on inorganic pyrophosphate, silicates and silicate/polyphosphate blends.

### Thermal Antiscalant

**Vitherm 700** is a blended antiscalant developed for use in thermal distillation systems. Low application rates of Vitherm 700 are effective at preventing scale and metal oxide precipitates over the full range of operating temperatures.

See Also:

Case study showing the effect of the membrane sizing agent.  
Avista Advisor 3 for calculation of Antichlor 30 dose rate.

10/08

