

### ADVANTAGES

- Designed to inhibit inorganic scale formation in membrane separation processes
- Inhibits calcium carbonate scale up to a Calcium Carbonate Nucleation Index (CCNI) of 2.3
- Helps reduce or eliminate acid dosing in RO/NF feedwaters that contain high alkalinity, even when operating at recoveries  $\geq 90\%$
- Effectively stabilizes metal ions and disperses insoluble metal oxides in the reject
- Controls calcium fluoride, calcium sulfate, barium sulfate and strontium sulfate scales in waters with a high fouling potential
- Environmentally compatible, especially where discharge of waste into the environment is a concern
- Certified by NSF to NSF/ANSI Standard 60

### TYPICAL PROPERTIES

Appearance	Clear light yellow to amber liquid
Odor	Characteristic
Solubility in water	Complete
pH (as is) @ 25°C	< 2.0
Specific Gravity	1.20 $\pm$ 0.05

### PACKAGING

5 gallon pails, 55 gallon non-returnable plastic drums, 275 gallon totes and bulk shipments

### SAFETY & HANDLING

Store in a cool, dry place. In accordance with good safety practice, handle with care and avoid contact with eyes and prolonged or repeated contact with skin. For more information, see the Safety Data Sheet provided with this product.

### CHEMICAL FEEDING AND CONTROL

#### Injection:

AWC A-109 should be injected continuously into the RO feedwater line, always downstream of multimedia filters, and preferably downstream of the cartridge filters in the presence of a static mixer. In the absence of a static mixer, dosing upstream of the cartridge filters will serve as a substitute to improve mixing.

#### Dosing:

The dosage required to inhibit scale formation will typically be in the range of 1- 5 ppm, depending on feed water quality and system operating parameters. Dosage can be determined using Proton<sup>®</sup> membrane antiscalant projection software, or can be provided by an AWC technical representative.

#### Dilution:

AWC A-109 is designed to be fed neat. However, if the minimum output of the dosing pump exceeds the required dosage, then dilution will be necessary. For product dilution, **always use water that is free of any detectable hardness** – deionized water or RO permeate are preferred due to their higher purity, but softened water is also acceptable.

This product contains a preservative to prevent biological growth in the feed tank. Dilution in excess of 10X will impact the potency of the preservative. If dilution beyond 10X is unavoidable, it is recommended to replace the diluted product frequently, preferably every 7 – 10 days.

