



American Water Chemicals, Inc.

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AWC A-109 ANTISCALANT FOR MULTISTAGE FLASH EVAPORATORS (MSF)

Description

AWC A-109 is a high performance, aqueous blend of proprietary scale inhibitors designed for superior control of calcium salt precipitation, scale formation and fouling in seawater multistage flash distillation plants.

AWC A-109 is effective against alkaline scale formation at the highest top brine temperatures (TBT) in use today. It is especially recommended for use in plants operating at TBT greater than 100°C, where total control of particulate fouling and sludge is critical to maintain thermal efficiency.

AWC A-109 has superior control of Calcium Sulfate, Barium Sulfate, Strontium Sulfate, Calcium Carbonate, Silica, Iron and Manganese.

AWC A-109 will disperse any formed metal oxides, silt, clay and other colloidal particles in order to minimize frequency and difficulty of cleanings.

AWC A-109 is NSF approved under ANSI Standard 60 for drinking water applications

Features and Advantages

- Designed to inhibit inorganic scale formation in flash distillation processes
- Disperses insoluble particulates, sludges and slurries
- Effective threshold inhibitor and crystal modifier
- Excellent thermal and hydrolytic stability
- Environmentally compatible, especially where discharge of waste into the environment is a concern
- Product is not neutralized and therefore does not contain any caustic which unnecessarily increases solids content and weight of drum. As a result, each PPM of product will deliver a higher level of active ingredients than neutralized products.*

Chemical Feeding And Control

AWC A-109 is normally fed continuously into the seawater make-up line or into the recycle brine stream. It should be injected by chemical dosing pump from a dilution tank or directly from the drum. The amount of **AWC A-109** required to inhibit scale formation depends on the quality of feed-water, brine concentration factor and size and type of the flash distillation system. It should be dosed continuously and proportionately to the seawater make-up flow to maintain the recommended dose level. Typical dosage will be between 3 – 4 ppm. Dosage should be maintained by residual phosphonate test. Residual phosphonates should be 0.6 – 0.8 ppm as active phosphonates.

Typical Properties

Appearance	Clear, Yellow to Amber Liquid
Stability	Excellent
Solubility	Completely Soluble
pH (Undiluted)	< 1
Total Solids (Wt%)	33.0 – 35.0*
Specific Gravity, 25°C	1.21 ± 0.05

Safety And 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 Material Safety Data Sheet provided with this product.

Packaging

AWC A-109 is packaged in 55 gallon, non-returnable plastic drums.