

OP-3: INTRODUCTION TO SPECTRA CHEMICALS

We use four types of chemicals: SC-1, SC-2, SC-3, and propylene glycol antifreeze. SC-1 and propylene glycol are for system storage, while SC-2 and SC-3 are for membrane cleaning.

Note: Never use any chemicals with the system pressurized! Always open the pressure relief valve 1/2 turn. Always follow the instructions for purging the chemicals as shown in the New System Startup section of your owner's manual.

Storage: SC-1 prevents biological growth when your system is idle. It should not be used as a cleaning chemical, nor will it protect your system from freezing. A jar of SC-1 is mixed with 1 to 2 gallons of product or dechlorinated fresh water in a bucket and circulated through the system for 10 minutes. This treatment will protect the system for six months, after which the SC-1 treatment must be repeated. To use SC-1, follow the instructions for **Storage Procedure**, in your owner's manual.

Spectra systems should be stored with propylene glycol if freezing is likely to occur. This is a food grade antifreeze used to winterize RV's, boats, and cabins. Propylene glycol also works very well for preventing biological growth in warm climates and is good for one year. See **Winterizing with Antifreeze** in your owner's manual (OP-1 document on the Spectra website).

Note: Do not use metasodium-bisulfate, Citric Acid, or any other storage chemical not supplied by Spectra. These chemicals, used to store other watermaker brands, are very acidic and will damage the Clark Pump and void the warranty.

Cleaners: Cleaning can be detrimental to the membrane and shorten its life. Avoid unnecessary cleaning. Avoid cleaning as a diagnostic tool.

SC-2 is an alkaline cleaner used to remove light oil, grime and biological growth. It is most effective if heated to 120 deg. F, which is difficult on a boat. In most cases the water quality will increase in PPM (salinity) after an SC-2 cleaning. After a few hours it should recover to near the level it produced before the cleaning.

SC-3 is an acid cleaner used to remove mineral and scale deposits. In most cases this is used first and if there is no improvement, go on to the SC-2. SC-3 will in most cases lower the product PPM and overall pressures. Scaling is a slow process that may take several months or years. SC-3 is less harmful to the membrane and will almost always improve the performance of an older membrane.

For cleaning with either SC-2 or SC-3, see the **Cleaning Procedure** section of your owner's manual.

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