

# CHEMICAL #3

## Instructions For Use

### SINGLE USE PRESERVATIVE FILTERS

#### CONTACT INFORMATION

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1. Turn Unit OFF.
2. Close raw water inlet sea cock, be sure cleaning valve (if unit is equipped with one) is in the normal overboard discharge position and perform a fresh water flush of the unit. (Refer to your manual, for fresh water flush procedure)
3. When fresh water flush is complete, shut unit down.
4. Turn Cleaning Valve (if unit is equipped with one) to the CLEAN position, creating a re-circulating loop (no overboard discharge should be seen).
5. Remove the pre-filter cartridge from the pre-filter housing and replace it with preservative chemical #3 cartridge (Green Stripe).
6. Fill the pre-filter housing with clean un-chlorinated (distilled) water and re-secure the housing, with the chemical cartridge now inside.
7. Place the R.O. Unit's High Pressure By-Pass Valve in the CLEAN (by-pass) position.
8. Start the R.O. unit's low pressure pump (or both the low pressure and high pressure pumps, if unit is wired for this only, i.e. Village Marine Tec.'s Little Wonder 12vdc units).
9. IF your R.O. unit does not have a high pressure by-pass valve, check the high pressure gauge and make sure the reading is '0'. IF NOT '0', then adjust the pressure down to '0' by turning the unit's pressure regulating valve counter-clockwise, until the pressure gauge reads '0'.
10. Let the unit run in this "re-circulate mode" for 30 minutes.

11. After 30 minutes, SHUT THE UNIT OFF.
12. Remove the chemical #3 cartridge from the pre-filter housing and re-secure the filter housing, with NO filter cartridge in the housing.
13. The R.O. Unit is now preserved ("pickled") and may be left unattended, with no additional operation, or flushing, for a recommended duration, not to exceed 4 months.
14. NOTE: IF the R.O. Unit is to be stored for longer than 4 months, the above procedure must be repeated, using new preservative chemical #3, after first FLUSHING OUT THE EXISTING chemical #3 in the unit, by performing a fresh water flush for 10 minutes (making sure the fresh water goes through a carbon block filter, prior to entering the R.O. unit), with everything "going over-board" (cleaning valve in the over-board position). THEN, repeat STEP #'s 4 through 12, above.

To return the unit to NORMAL operation and UN-PRESERVE, place a NEW 5 micron filter in the pre-filter housing, put the cleaning valve in the NORMAL position (discharge over-board), open the raw water inlet sea cock, start the unit's low pressure pump and let unit run for 10 minutes with everything (product water, included), going over-board. Next, start the unit's high- pressure pump. Then slowly bring the high pressure up to 800psi (either by turning the high pressure by-pass valve slowly to the NORMAL RO position, or adjusting the pressure regulator, if no high pressure by-pass valve on unit, by turning the regulator clock-wise, until the high pressure gauge reads 800psi). Let the unit run for an additional 30 minutes, with the product flow going over-board (dump mode, or product line to drain), instead of to tank, before allowing product flow to go to vessel's fresh water tank.

## MEMBRANE PRESERVATIVE CHEMICAL #3

### 1. Hazard Data:

#### Appearance and Odor:

Moderate health hazard, irritant  
Coarse white granules with sulfur dioxide odor

#### Solubility in Water:

Complete

#### pH of 1% Solution @ 20°C:

4.5

#### Fire and Explosion data:

No hazard exists

#### Reactivity Data:

Minimal

#### Hazardous Polymerization:

Will not occur

#### Toxicity:

TLV 5

### 2. Health Hazard Information:

- (a) Oral Ingestion: Not considered a primary route of contact
- (b) Eye Contact: Considered a moderate irritant
- (c) Skin Contact: Considered a mild irritant
- (d) Inhalation: Considered a moderate irritant

### 3. Emergency First Aid:

- (a) Oral Ingestion: Do not induce vomiting. If conscious, give lots of water or milk. Get immediate medical attention.
- (b) Eye Contact: Flush eye immediately with large volume of water for 15 minutes lifting eyelids occasionally. Get medical attention.
- (c) Skin Contact: Wash contacted area with soap & water. Launder clothing before reuse.
- (d) Inhalation: Move to fresh air. Give artificial respiration if not breathing. Get immediate medical attention.

### 4. Spill or leak: Steps to be taken in case material is released or spilled.

- (a) Sweep/shovel into salvage containers.
- (b) Flush area with water to remove final traces.

### 5. Waste Disposal Method:

- (a) Material may be diluted with water & flushed into an approved drain.
- (b) Comply with all applicable federal, state, and local regulations.

### 6. Special Protection Information:

- (a) Respiratory Protection: NIOSH approved respirator
- (b) Ventilation: Local mechanical exhaust
- (c) Protective Gloves: Acid-resistant gloves
- (d) Eye Protection: Chemical goggles. Contact lenses should not be worn.

### 7. Handling and Storing: Conform to normal warehousing conditions

- 8. Product Information: Membrane preservative is a mild acidulating and reducing agent for use as a bleach, antichlor, antiseptic in the fermentation industries and food preservative.
- Figure 5-13. Membrane Preservative Product Information



## VILLAGE MARINE TEC.

Fresh Water from the Sea