GLOBAL FILTER
Filtration Group®

INSTRUCTIONS

NIL-8™ SANITIZING SOLUTION & MEMBRANE CLEANER

NIL-8™

A PERACETIC ACID-BASED SOLUTION

CAUTION: You must read, understand, and follow the complete list of Precautionary Statements and Directions for Use that accompany the product.

Instruction: Sanitization of Water Systems

Operators of ultrapure water (UPW) systems can effectively sanitize their equipment with an application of Nil-8 Sanitizing Solution. It's important to confirm that all system components are compatible with dilute solutions of peracetic acid and hydrogen peroxide. Note: that at the recommended dilution to 400 ppm peracetic acid (~0.85% concentration of NIL-8), the solution pH will be 3.0-3.5.

MATERIALS COMPATIBILITY

VG..... Very good compatibility. No degradation observed.
Good... Minor reaction or swelling evident.
Fair..... Moderate reaction with some loss of mechanical properties.
Poor.... Significant break-down occurs.

Material	Compatability	
	Concentrated NIL-8	0.8% NIL-8 Solution
ABS	Good	VG
Acrylic	VG	VG
Brass/Copper	Poor	Poor
CPVC	VG	VG
EPDM/EPR	Poor	VG
FKM/Viton	VG	VG
NBR/Buna-N	Poor	Fair
Polyamide	Fair	VG
Polyethylene	VG	VG
Polypropylene	VG	VG
Polysulfone	VG	VG
Polyurethane	Poor	VG
PVC (rigid)	VG	VG
Polyvinylidene Fluoride, PVDF	VG	VG
Polytetrafluoroethylene, PTFE	VG	VG
Silicone	VG	VG
Stainless Steel	VG	VG

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PROCEDURE:

1. Prepare a 0.85% (by product volume) solution by adding NIL-8 Sanitizing Solution in accordance with the mix table below. Alternately, a feeder vessel or open tank may be used to feed and mix the appropriate amount of NIL-8 into the water system based on the estimated system volume of water. The liquid temperature is to be 18-23°C (64-73°F).

2. Recirculate the dilute solution until well-disbursed. The concentration of peracetic acid (PAA) should be verified using the appropriate test strips. The nominal target is 400ppm PAA which can be confirmed by getting an indication within the range of 250-500ppm on the test strips.

3. System elements should be exposed to the solution for a minimum of 30 minutes or up to a recommended maximum duration of 4 hours, based on the estimated bacterial load in the water system.

4. After the exposure period, introduce fresh RO water to rinse and re-fill the system volume. Check for residual hydrogen peroxide using H_2O_2 Residual Test Strips. Follow the directions on the test strip label or instruction sheet. Residual test strip should indicate less than 2 ppm. Rinse times will vary depending on the size of the RO system.

5. Only in the most sensitive operations is it necessary to achieve "zero" detectable H_2O_2 at the end of the sanitization cycle. As a practical matter in many cases, putting the UPW system back into operation with 1-2ppm H2O2 is not uncommon and does not damage the ion exchange resin or other system components. The benefit to the service technician is that it can often take from one to several hours for the level to drop from 1-2ppm down to a non-detectable level.

Quantity of NIL-8 Needed Based on System Size		
System Volume	**By Weight**	**By Volume**
50 gal.	3.84 lb	0.43 gal
100 gal.	7.68 lb	0.85 gal
250 gal.	18.77 lb	2.13 gal
500 gal.	28.2 lb	4.27 gal
750 gal.	37.53 lb	6.4 gal
1,000 gal.	75.06 lb	8.53 gal
200 lit	1.75 kg	1.61 lit
400 lit	3.5 kg	3.22 lit
1,000 lit	8.75 kg	8.05 lit
2,000 lit	17.5 kg	16.1 lit
3,000 lit	26.25 kg	24.15 lit
4,000 lit	35 kg	32.2 lit

NOTES:

1. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
2. You must read, understand, and follow the complete list of Precautionary Statements and Directions for Use that accompany the product.
3. Do not store NIL-8 in the diluted form as the composition will not remain stable over time.
4. SHELF LIFE: 1 year based on the container remaining capped when not in use and stored away from direct light and under 80° F.

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