

## Cleaning and Regenerating Procedures For Seitz MEMBRACart XL Membranes and Seitz PREcart PP II Cartridges

- A. Forward flow with cold water up to 68°F at flow rates up to 8 gallons per minute per 10" of membrane cartridge length.  
**DO NOT ALLOW BACKWARD FLOW THROUGH MEMBRANE CARTRIDGES.**
  
- B. Forward flow with hot water up to 175°F at flow rates up to 4 gallons per minute per 10" of membrane cartridge length.  
**DO NOT ALLOW BACKWARD FLOW THROUGH MEMBRANE CARTRIDGES.**
  
- C. Soak overnight in a 2% by weight, caustic solution  
(2% by weight, sodium hydroxide mixed with water at a temperature up to 145°F).  
  
**CAUTION: This solution is highly caustic and can cause severe eye injury.  
Required Safety Equipment: Rubber gloves, rubber apron and full face shield**
  
- D. After soaking, remove membrane cartridges and hose down with tap water.
  
- E. Soak in a high acid solution with pH below 2.0 for **at least one hour**.  
Be certain to take proper safety precautions.
  
- F. Remove cartridges and hose down with tap water. Install cartridges in the housing.

The caustic solution should last a very long time. To refresh the solution, add caustic concentrate to return the solution to the original pH.

The high acid solution will need to be dumped every two to four weeks since there are acid tolerant bacteria that can live in pH 1.7-2.0.

Seitz PREcart PP II are cleaned in the same manner as the Seitz MEMBRACart XL in addition you can backwash (reverse flow) the Seitz PREcart PP II to remove inorganic material.

After cleaning, acidified SO<sub>2</sub> solutions can be used for short term storage, though Orings must be removed during storage in SO<sub>2</sub>. Solutions of alcohol (40%), such as vodka can be used for short or long term storage.

**NOTE:** The above procedures only apply to SEITZ MEMBRACart XL Membranes and SEITZ PREcart PPII Cartridges