



## **ELEMENT STORAGE RECOMMENDATION**

When plants are shut down, elements need to be preserved and stored in order to prevent bacterial growth on the membranes. The elements can either be left in the system or unloaded and stored. Here are our recommendations for element storage:

### In System Storage: Short term (less than a month)

1. Before storage procedure, the elements need to go through a CIP and be flushed clean.
2. Pump in a solution of 1% sodium bisulfite (food grade) and allow the elements to soak in it.
3. The pH of the solution should be within 3.5 - 9.5 and monitored periodically. If it drops out of that range, a new solution should be used since long term exposure to acidic or basic environments will harm the membranes.
4. The concentration of bisulfite should be monitored periodically. If its concentration drops below 0.1%, then a new solution should be used.
5. The temperature should be kept at 25 °C or less.

### Unloaded Storage: Long term (more than a month)

1. Before storage procedure, the elements need to go through a CIP and be flushed clean.
2. Unload the elements and allow them to drip dry.
3. Soak them in a solution of 1% sodium bisulfite (food grade) and 18% propylene glycol for 30 minutes. Monitor the concentrations of the soaking solution as it might become diluted over time and readjust accordingly.
4. Allow the elements to drip dry. Put them in plastic bags and seal them. The bags should not contain the soaking solution.
5. Store the elements in a cool warehouse with a dark environment or have them boxed. The temperature should be kept between 10 – 20 °C as refrigeration will help storage.

Osmonics believes the information above are accurate. However, these are only recommendations and should be treated as that. Osmonics offer no guarantee since the conditions and methods of use are beyond our control. We assume no liability to the process.

