FTSH₂O™ Forward Osmosis Membranes
Handling, Preservation and Storage of Flat Sheet Membranes

This document provides information for Flat Sheet Membranes sold under Part Numbers FSB-CTA-8X10, FSB-CTA-10X10 and FSB-CTA-12X12. The product is packaged individually in sealed plastic bags and 10 sheets are placed in a cardboard box. Membrane must be kept moist at all times. Do NOT allow to freeze. Refrigerated storage is recommended; we recommend storage of new, sealed and unused membranes between 3 to 25 degrees Celcius (37 to 77 degrees Fahrenheit). Do NOT store in direct sunlight. Under proper storage conditions, unused membranes have a shelf life up to 3 years.

Preservation and Storage of Used Flat Sheet Membranes

Any FTSH2O™ Forward Osmosis membrane that has been used and removed from a test device for storage or shipping must be rinsed and preserved in a preservative solution as follows:

- Rinse the membrane with water to remove contaminant or fouling materials.
- Use a storage solution of 1% food-grade Sodium Metabisulfite (SMB, chemical formula Na₂S₂O₅) in good-quality water (distilled or better quality).
- Place the wet membrane into a sealed plastic bag; Keep the membrane flat, remove entrapped air as feasible. Leave a little excess preservative solution in the plastic bag to keep the membrane wet during storage. Seal the plastic bag securely.
- Identify the membrane, preservative solution and date on the outside of the bag. Store between 3 to 25 degrees Celcius. Do not allow to freeze. Do not store in direct sunlight.
- Membranes should be visually inspected for biological growth every three months. If the preservative solution appears to be cloudy, the membrane should be rinsed with 1% SMB and repackaged as above.
- The pH of the preservative solution must never drop below pH 3 or go above 8. In the absence of a buffer a pH decrease can occur when bisulfite is oxidized to sulfuric acid. Therefore, the pH of the bisulfite preservation solution should be spot checked at least every 3 months. If needed, re-rinse in 1% SMB and repackage as above.
- Wear protective gloves and sleeves to avoid prolonged contact with skin and sleeves when working with preservative. For additional safety information, please refer to the MSDS for Sodium Metabisulfite.

Notice: Fluid Technology Solutions Product Warranty Period is 12 months from date of shipment.

Notice: The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water.

Notice: No freedom from any patent owned by Seller or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer’s use and for ensuring that Customer’s workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Seller assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.