

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.

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