

# TriClean™ 214TF

## High-pH Composite Membrane Cleaner

Organic, particulate, silica and biological fouling are a major problem in reverse osmosis (RO) systems. TriClean 214TF is engineered to provide the most effective cleaning of biofouling, organics, silica and particulates from membranes, providing longer run times and extending membrane life. TriClean 214TF is a liquid cleaner that removes foulants without damaging sensitive composite membrane elements.

### CLEANING PROCEDURE

Prior to cleaning, record pH and TDS readings of the permeate and concentrate water for reference during the final rinse. Appropriate safety equipment should be used.

1. Fill cleaning tank with RO water.
2. Add 11 liters (3 gal) of TriClean 214TF for every 379 liters (100 gal) of water.
3. Adjust the pH to 11 – 12 using additional chemical to increase the pH and acid as necessary to lower the pH. Use caution as high pH may damage membrane.
4. Heat the cleaning solution to 35°C (95°F).\*
5. Recirculate cleaning solution through each stage, independently, for a minimum of 1 hour.
6. Static soak each stage, independently, for 1 hour.
7. Recirculate cleaning solution through each stage again, independently, for 30 minutes.
8. Rinse cleaning solution from system using RO permeate water.

\* Consult with membrane manufacturer to determine max allowable temperature.

\*\*For a more detailed cleaning procedure, please see our Membrane Cleaning Guide – Water Application Elements (TSG-C-001).

### SYSTEM RESTART PROCEDURE

Flush permeate and concentrate of membrane system to appropriate drain at <50 psi for 20 minutes. Restart membrane system with both permeate and concentrate diverted to appropriate drain and flush for a minimum of 30 minutes. System can be put back online when RO permeate TDS, concentrate TDS and pH are similar to readings taken prior to cleaning.

### PACKAGING

TriClean 214TF is shipped as a liquid in 5 gallon plastic pails or 55 gallon plastic drums.

### SDS INFORMATION

For the most up to date SDS information, please contact MANN+HUMMEL Water & Fluid Solutions Technical Service or visit our website at [www.microdyn-nadir.com](http://www.microdyn-nadir.com).

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