



## TriSep Corporation Chemical Manual

### **TRICLEAN 212TFNE HIGH PH POWDER CLEANER**

- Used to remove biological, organic, and colloidal fouling on Polyamide Composite membrane.
- Does not contain EDTA

#### **PROBLEM**

In many installations worldwide, polyamide composite RO and NF membranes can become fouled with biological, organic, and colloidal foulants. These foulants can quickly lead to a loss of system performance associated with a decrease in permeate flow, and increase in differential pressure, and a loss of element rejection. If left unchecked, this fouling can permanently damage the membrane elements leading to costly and premature membrane replacement. Some municipal wastewater treatment plants do not allow discharge of EDTA into the plant. TriClean 212TFNE was created to meet these requirements.

#### **SOLUTION**

TriClean 212TFNE removes biological, organic, and colloidal foulants without damaging sensitive polyamide composite membrane elements.

#### **APPLICATION**

TriClean 212TFNE should be mixed in a cleaning tank equipped with a mechanical mixer, heater, low pressure recirculation pump, and cartridge or bag filter. This cleaner works best when applied at a flow rate of 8-10 gpm per 4" pressure tube or 30-40 gpm per 8" pressure tube at a pressure of between 20-50 psi at a pH of 11.5. (For silica, use at a pH of 12. Use caution as pH's above 12 may damage membrane) Add 2 lbs of TriClean 212TFNE per 15 gallons of RO permeate or DI water. Recirculate solution for 1 hour checking pH regularly. Use sulfuric acid to lower pH and add additional TriClean 212TFNE or sodium hydroxide to increase pH. Shutdown pump and allow to soak for 1 hour. After soak, recirculate for an additional 20 minutes and then rinse. This solution should be used after a low pH cleaning with TriClean 210, except for emulsified oil fouling in which case the order should be reversed.

#### **PACKAGING**

TriClean 212TFNE is shipped as a powder in 45 kg plastic containers. Pricing is F.O.B. our factory in Germany. Delivery for most orders is 1-2 days after receipt of order.

#### **MSDS SHEETS**

For the most up to date information on MSDS sheets, please contact our web site at [www.trisep.com](http://www.trisep.com)