

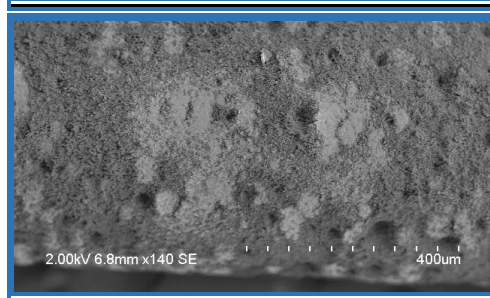
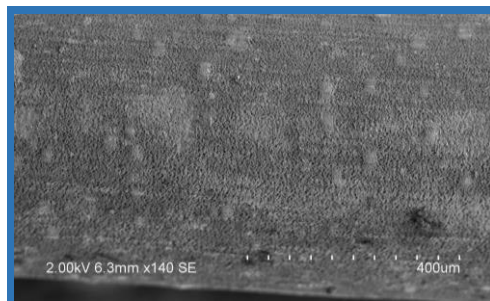


AWC C-437 - MF/UF Membrane Cleaning Compound

ADVANTAGES

- **AWC C-437** is a concentrated liquid formulation designed for use as a high pH cleaner of ultrafiltration and microfiltration membrane surfaces.
- **AWC C-437** works to remove the most stubborn biofilms and organic foulants.
- **AWC C-437** is especially effective in removal of metal oxide deposits when used in a pH range of 9 – 10.5.
- **AWC C-437** is buffered so as not to exceed a pH of 12.
- **AWC C-437** does not cause chemical hydrolysis of polypropylene and PVDF membranes.
- **AWC C-437** is compatible with most MF/UF modules

PHOTOS: Top: SEM image of MF fiber surface 140X magnified, cleaned with AWC UF-437 **Bottom:** SEM image of MF fiber surface 140X magnified, cleaned with sodium hydroxide. Pores have been damaged.



TYPICAL PROPERTIES

Appearance	Clear Colorless to Light Yellow Liquid
Odor	Slight Characteristic Odor
pH (as is)	>12
Specific Gravity	1.1 ± 0.1
Water Solubility	Completely Soluble

CHEMICAL FEEDING AND CONTROL

The cleaning solution should be prepared using potable water that is free of residual chlorine or other oxidizing agents. (RO permeate or DI water is preferred). Do not use hard water. Add 1 - 2 Gal of **AWC UF-437** to every 100 gal of water (1 - 2 % solution) , depending on severity of fouling. The water must be heated to the maximum temperature allowed by the module manufacturer. Adjust the pH to the highest pH allowable by the membrane manufacturer. If pH needs to be adjusted downwards, use HCl (31% Muriatic acid) and add only 0.1% by volume at a time. Mix thoroughly by recirculation before checking pH, and repeat addition as necessary. If pH needs to be adjusted upwards, use NaOH (50% Caustic Soda) and add only 0.1% by volume at a time. Mix thoroughly by recirculation before checking pH and repeat addition as necessary.

The cleaning solution should then be circulated throughout the modules with the filtrate valve closed, in the feed direction for 30 min (for tubular designs). Reverse the direction of the flow and recirculate for 30 more minutes. Repeat as necessary until desired cleaning results are achieved. **AWC UF-437** should be added as necessary to the cleaning solution to maintain the pH range. Optimal iron removal occurs at pH of 9.0 – 10.5. For the systems that allow back flushing may be back flushed with cleaning solution from the filtrate to the feed for 15 minutes. After the cleaning is finalized the modules must be flushed with MF/UF filtrate.

SAFETY AND HANDLING

Store in a cool, dry and well ventilated area. Keep containers closed. Wash contaminated clothes before re-use. Wash thoroughly after handling. Please see MSDS for more details.

Packaging

ISO 9001:2008 Certified Company

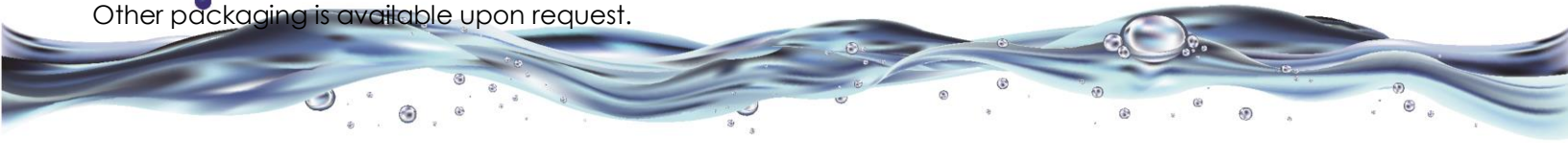




AWC

AWC C-437 is packaged in 5 Gallon plastic containers.
Other packaging is available upon request.

American Water Chemicals, Inc.
www.membranechemicals.com



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