

AWC[®] UF-431

MF/UF Membrane Cleaning Compound

ADVANTAGES

- Concentrated liquid formulation designed for use as a high pH cleaner of ultrafiltration and microfiltration membrane surfaces
- Highly effective at dispersing colloidal clays and other suspended particles
- Works to remove the most stubborn biofilms and organic foulants
- Supports the cleaning of acid insoluble sulfates of calcium, barium and strontium as well as calcium fluoride
- Especially effective in removal of metal oxide deposits when used in a pH range of 9.0 – 10.5
- Buffered to maintain pH range even when product is accidentally overdosed
- Compatible with most MF/UF modules
- Certified by NSF to NSF/ANSI Standard 60

TYPICAL PROPERTIES

Appearance	Clear light yellow liquid
Odor	Slight characteristic
Solubility in water	Complete
pH (as is) @ 25°C	>12
Specific Gravity	1.20 ± 0.10

PACKAGING

5 gallon pails, 55 gallon non-returnable plastic drums, 275 gallon totes

SAFETY & HANDLING

Store in a cool, dry and well ventilated area. Keep containers closed. Wash contaminated clothes before re-use. Wash thoroughly after handling. For more information, see the Safety Data Sheet provided with this product.

CHEMICAL FEEDING AND CONTROL

Prepare cleaning solution 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 gallons of AWC UF-431 to every 100 gallons of water (1-2 % solution), depending on severity of fouling. Heat water to the maximum temperature allowed by the module manufacturer. Adjust 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; 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; repeat addition as necessary.

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 direction of flow and recirculate for 30 more minutes. Repeat as necessary until desired cleaning results are achieved.

AWC UF-431 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, back flush 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.

