

Introduction:

The current practice of cleaning ultrafiltration and microfiltration (UF/MF) membrane systems is a simple clean using generic chemicals including; citric acid, chlorine, and caustic. Within certain limits, the wide variety of UF/MF membranes are generally compatible with these products and cleaning results are satisfactory in many cases.

However, generic solutions do not always succeed in returning the membranes to design performance values. This led Avista to develop a new range of gentle but more effective cleaners specifically for UF/MF membranes. These specialty formulations can be applied in place of generic chemicals or used as a periodic 'recovery cleaner' between generic cleanings.

The following table outlines the AvistaClean® products and the foulants they address. The formulations have proven effective on membranes supplied by: Hydranautics, Siemens Memcor®, Pall Corporation, Norit X-Flow, and Zenon. Membrane types include PS (polysulfone), PES (polyethersulfone), PVDF (polyvinylidene fluoride) and PAN (Polyacrylonitrile).

Important Note:

There are a variety of membrane types and each has specific limitations as it pertains to acceptable pH ranges, chlorine exposure, and other critical data. For this reason, it is imperative to review the membrane manufacturers limits and the AvistaClean technical data sheets for compatibility prior to use.

Powders

Membrane Type: PS/PES				MF/UF Cleaner Selection				
Membrane Type PVDF			Metals					
Membrane Type: PAN		Product Name:		Fe, Mn, Al	Calcium Carbonate	Non Biological	Biological	
			X	X				
		X				X	X	X
X	X	X	X	X	X			

* AvistaClean 1000a contains chlorine. Be sure to review the membrane manufacturers specifications for chlorine tolerance prior to use. For membranes that are not chlorine tolerant, use AvistaClean MF 1000.

