

AMI[®] Membrane Chemicals

MEMBRANE CLEANING & SUPPORT CHEMICALS

Applied Membranes, Inc. has formulated its own proprietary membrane cleaning chemicals. These products are a result of over 20 years of hands-on experience of our engineers and chemists. We offer technical expertise and assistance in troubleshooting and cleaning of RO membranes to give you an optimum system performance.



STANDARD CLEANERS

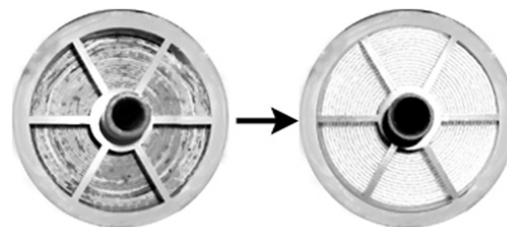
- Sold in 25 lb containers

Product	To Remove	For Membrane Type
AM-11-25	Scale	TF
AM-22-25	Organics	TF
AM-33-25	Organics	CA
AM-44-25	Scale	CA
AM-55-25	Biofoulants	CA,TF,UF, NF
AM-66-25	Biofoulants	CA,TF
AM-77-25	Biofoulants	CA,TF
AM-99-25	Silica	TF
AM-124-25	Iron	CA, TF



OTHER CHEMICALS

Product	Description	Container Size
AM-88-5	Membrane Preservative	5 lb
AM-88-25	Membrane Preservative	25 lb
AM-225	Glycerine Lubricant/Preservative	1 gal.
PS-77	Disinfectant	1 qt.



! Complete cleaning instructions and other technical information are included at the end of this catalog.

AMI[®] Membrane Chemicals

MEMBRANE CLEANING & PRESERVING CARTRIDGES

MEMBRANE CLEANING CARTRIDGES

- Clean membranes without removing them from your system
- Reduce Downtime
- Maintain system performance at a higher level
- Prolong membrane life with regular use
- For use on Thin Film Membranes in systems up to 20,000 GPD



HOW DO THEY WORK?

Simply exchange the pre-filter cartridge in your system with a cleaning cartridge. Follow the instructions. Restart the system. You may repeat the process, if required. We recommend a monthly cleaning to obtain optimum results.

Model No.	Contains Cleaner	To Remove	Cartridge Length	For Housing Type	No. of 4"×40" Membranes Cleaned Per Ctg.
C-C2510-A11	AM-11	Scale	10"	Standard	1
C-C2520-A11	AM-11	Scale	20"	Standard	1-2
C-C4210-A11	AM-11	Scale	10"	Big Blue	2-3
C-C4220-A11	AM-11	Scale	20"	Big Blue	4-6
C-C2510-A22	AM-22	Organics	10"	Standard	1-2
C-C2520-A22	AM-22	Organics	20"	Standard	2-4
C-C4210-A22	AM-22	Organics	10"	Big Blue	4-6
C-C4220-A22	AM-22	Organics	20"	Big Blue	8-12

MEMBRANE PRESERVING CARTRIDGES

- Cartridges are loaded with a pre-measured amount of our proprietary membrane preservative, AM-88.
- Preserve system and membranes in-place for extended periods of system shut-down.

AMI Model No.	Cartridge Length	For Housing Type	No. of 4"×40" Membranes Preserved Per Ctg.
C-C2510-A88	10"	Standard	1-2
C-C2520-A88	20"	Standard	2-4
C-C4210-A88	10"	Big Blue	2-4
C-C4220-A88	20"	Big Blue	4-8

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AMI[®] Membrane Services

2"-8" DIAMETER IN ALL LENGTHS AND TYPES

Our expertise in reverse osmosis membrane technology is also offered in a variety of membrane services.

FLOW AND REJECTION TESTING

Includes:

- Physical examination and testing under standard conditions
- Cleaning recommendations

COMPLETE STANDARD CLEANING

Includes:

- Acid and Alkaline cleaning with our own proprietary membrane cleaning chemicals
- Testing before and after each cleaning
- Test results and analysis
- Customized recommendations for membrane maintenance

MEMBRANE PRESERVATION

Includes:

- Preservation in our own proprietary membrane preservative
- Vacuum sealing for storage

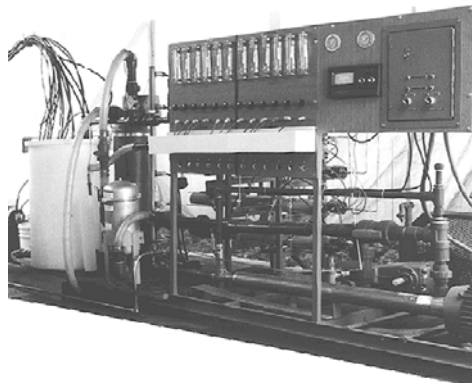
MEMBRANE FOULANT ANALYSIS

Includes:

- Analysis of feed water and spent cleaning solution
- Up to 16 different determinations

MEMBRANE CLEANING ON SITE

- Applied Membranes will send trained technical personnel to the field to clean membranes in place. Please contact us for a quote.




Membrane Chemicals

ANTISCALANTS AND DISPERSANTS

FLOCON®

AMI Part No.	Product	Description	Unit of Measure
AS-100-50	FLOCON 100	Antiscalant	50 lb. Container (Approx. 5 Gal.)
AS-100-500	FLOCON 100	Antiscalant	500 lb. Drum (Approx. 50 Gal.)
AS-260-50	FLOCON 260	Antiscalant/Dispersant	50 lb. Container (Approx. 5 Gal.)
AS-260-500	FLOCON 260	Antiscalant/Dispersant	500 lb. Drum (Approx. 50 Gal.)



USING FLOCON® 100 AND FLOCON® 260

Dose Rate

The amount of Flocon required to inhibit scale formation depends on the degree of supersaturation of the insoluble salts at the point of highest concentration in the system. The degree of supersaturation in turn depends on the concentration of the ionic species in the feedwater, the overall salinity of the feed, the temperature of the feedwater, the percentage of the feedwater recovered as permeate and the type of membrane used for the application.

FLOCON Solution Concentration* %	Amount of Solution to be Injected per 1,000 Gallons of Feed Water, In Gallons	
	3 ppm	5 ppm
100	0.003	0.005
50	0.006	0.010
20	0.015	0.025
10	0.030	0.050

* Use soft water or RO permeate to mix with Flocon.

Dose Method

Flocon should be added to a membrane system prior to the final cartridge filter. If media filtration or activated carbon is used, Flocon should be applied after these treatment stages.

Flocon should be delivered by dosing pump from a dilution tank, direct from the drum or from a bulk storage facility, into the feedwater at a rate that is determined by the size of the membrane system, the recommended dose rate and the delivery range of the dosing pump. It is recommended that the dosing pump be adjusted by the stroke length, while maintaining stroke frequency at a high level as possible to achieve even distribution of the Flocon in the membrane system feedwater.

CAUTION - Biological Activity:

Flocon contains a preservative that is effective up to a dilution of 1 part Flocon to 15 parts of system permeate water. General periodic cleaning of the dosing system is recommended as part of the planned maintenance program.

! *Chemical Metering Pumps are listed in Commercial Components, page 5-8.*

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