



Filtration for a Better Future...

PRE-STARTUP CLEANING PROCEDURE FOR KMS WINEFILTER MF CARTRIDGES

The following cleaning procedure must be performed prior to initial use of cartridges and whenever system has been inoperative for more than twenty-four (24) hours. This procedure will remove storage solution and condition membranes for production. Failure to follow this recommendation may lead to poor performance, could result in off-flavor development and will void cartridge warranty. Please also refer to the KMS Water Quality Guidelines on the reverse side of this document.

Step 1. Flush Cycle Neutral pH 122°F (50°C) 10 min.

Flush system with clean, soft water (122°F/50°C) until permeate and retentate are clear.

Step 2. Alkaline Cycle pH 10.5-11.0 122°F (50°C) 15 min.

Fill system with clean, soft water (122°F/50°C). Add to circulating water:

KOCHKLEEN® 230 Cleaner to adjust pH to 10.5-11.0

Circulate solution at standard pressure and flow conditions for 15 minutes.

Step 3. Drain/Flush Cycle Neutral pH 122°F (50°C) 10 min.

Drain, then fill and flush system with clean, soft water (122°F/50°C).

Step 4. Water Flux Neutral pH 122°F (50°C) 10 min.

Measure the water flux during the Step 6 flush cycle. If the system does not achieve the minimum water flux specified for the product when corrected to 25/15 psi and 122°F (50°C), repeat Steps 3-6 with 0.2% v/v KOCHKLEEN® KLD III Cleaner added to Step 3.

*For technical assistance, please contact a Cleaning Specialist at (978) 694-7050.
To place an order, please call our Customer Service Department at (978) 694-7005.*

Note: If KOCHKLEEN® cleaners are not readily available, please contact KMS.

KMS WATER QUALITY GUIDELINES FOR CLEANING & DIAFILTRATION

For All Polymeric Membrane and Ion Exchange/Adsorbent Resin Applications

Parameter	MF/UF	NF/RO & IE/Ads. Resin
Turbidity	< 1.0 NTU	< 1.0 NTU
Suspended Solids (see Note 1)	< 5 mg/l	< 1 mg/l
Calcium (Ca)	< 10 mg/l	< 5 mg/l
Total Hardness (as CaCO₃)	< 60 mg/l	< 30 mg/l
Iron (Fe)	< 0.05 mg/l	< 0.05 mg/l
Zinc (Zn)	< 0.3 mg/l	< 0.05 mg/l
Copper (Cu)	< 0.1 mg/l	< 0.05 mg/l
Manganese (Mn)	< 0.05 mg/l	< 0.02 mg/l
Aluminum (Al)	< 0.05 mg/l	< 0.05 mg/l
Silica, Reactive (as SiO₂)	< 10 mg/l	< 10 mg/l
Silica, Colloidal (as SiO₂)	< 1 mg/l	< 0.1 mg/l
Silicone	0 mg/l	0 mg/l
Total Bacteria Count (TBC)	< 1000 per ml	< 1000 per ml
E-Coli Count	0 per 100 ml	0 per 100 ml
Chlorine (as NaOCl)	< 1 mg/l	0 mg/l
D-Limonene (citrus applications only)	< 5 mg/l	0 mg/l
Fats, Oils and Grease	0 mg/l	0 mg/l
Total Organic Carbon (TOC)	< 1 mg/l	< 1 mg/l
pH (standard units)	6.5 – 7.5	6.5 – 7.5

1. The water supply must be free from particulate matter such as rust, scale, flakes, sandy and granular material, slurries, scum, algae and any chemical constituents that could foul or damage the membranes.
2. The water pH may need to be adjusted with acid or alkali depending on application and local conditions.
3. KMS membranes are available in many configurations and materials that may be affected differently by various water constituents. Softened water or evaporator condensate is generally acceptable for cleaning and flushing of polymeric membranes. Please consult with the KMS Process Group for the particular membrane in question.

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For related trademark information, visit www.kochmembrane.com/legal

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KPN 1020042-R4