

UltraPro™ A-1801

Acid Stable Membrane Data Sheet

Product description

Membrane Chemistry:	Proprietary Composite Ultrafiltration Membrane
Membrane Type:	Acid Stable Ultrafiltration Membrane 8040 Spiral Wound Element
Construction*:	Feed Spacer: 31 mil, 46 mil Permeate Tube: Polysulfone

*For special requests, please contact AMS

Specifications

Model	Permeability (LMH/bar)	Membrane Area m ² (ft ²)	Feed Spacer mil
A-1801-8040-31P	18	31 (333)	31
A-1801-8040-46P		24 (264)	46

Test Conditions: 2 bar (30 psi), 30°C (86°F), Flux measured with RO water. Permeate flux may vary for individual element but it will no more than 20% below the above value

Operating Information(*)

Maximum Operating Pressure:	10 bar (145 psi)
Maximum Operating Temperature:	50°C (122°F)
Maximum Cleaning Temperature:	50°C (122°F)
Allowable pH – Continuous Operation:	0-12
Allowable pH – Clean in Place (CIP):	0-13
Maximum Pressure Drop per Element:	0.5 bar (7.2 psi)
Recirculation Flow Rate	8040: Minimum 90 L/min (24 gpm), Maximum 280 L/min (74 gpm)

(*) Consult AMS Technologies for specific information

Recommended cleaning materials

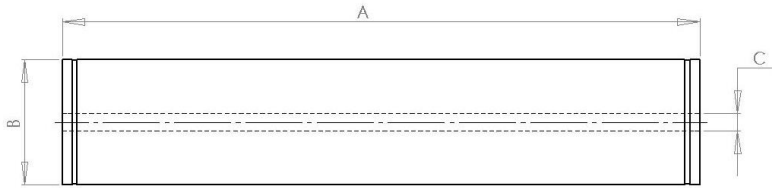
- Depending on the nature of the feed material, a choice can be made from the following cleaning agents:
 - Sodium hydroxide at pH 10-12, 40°C (104°F)
 - Nitric or hydrochloric acid at pH 1-2, 40°C (104°F)
 - 0.2-1% w/w Na-EDTA, pH 10.5-11, 35°C (91°F)
 - 0.5% anionic surfactant (such as SDS), pH 10.5-11, 35°C (91°F)
- Water quality for cleaning:
 - Maximum turbidity is 1 NTU

Lubricants:

For element installation, use only water or glycerin to lubricate seals. The use of petroleum or vegetable-based oils or solvents may damage the element and void any warranty.

Nominal Product Dimensions

For 8040:



Size	A		B		C	
	(Inches)	(mm)	(Inches)	(mm)	(Inches)	(mm)
8040	40	1016	7.9	200	1.122	28.5

Preservation

- Short Term (up to four weeks): 1% w/w sodium metabisulfite.
- Long Term: Please refer to the AMS element storage and handling instructions.

Storage

- The membrane should not be allowed to dry. It should be stored in a sealed bag, at 4°-30°C (39-86°F).

Acid Stability:

Typical solutions include:

20% H₂SO₄ 20% HCl 4% HNO₃
30% H₃PO₄ 15% Acetic acid

Our membranes run at high and stable fluxes in very acidic environment for 12 months and more.

Other

- Do not expose the membrane to chlorine or other oxidants.
- Sodium metabisulfite (without catalysts such as cobalt) is the preferred chemical to eliminate free chlorine or other oxidizers in the feed.