

## SCOTTCART MEMBRANE PES PRO

SINGLE LAYER ASYMMETRIC MEMBRANE CARTRIDGES DESIGNED FOR  
REMOVAL OF YEAST AND BACTERIA (MICROBIAL STABILITY) IN BEVERAGES

### DESCRIPTION

ScottCart final membrane polyether sulfone (PES) cartridges were optimized for sterile filtration of wine, cider, sparkling wine, beer, etc. The inert and highly asymmetric PES membrane provides validated microbial retention to typical spoilage organisms.

### What's the difference between this cartridge and the ScottCart Membrane (PES)?

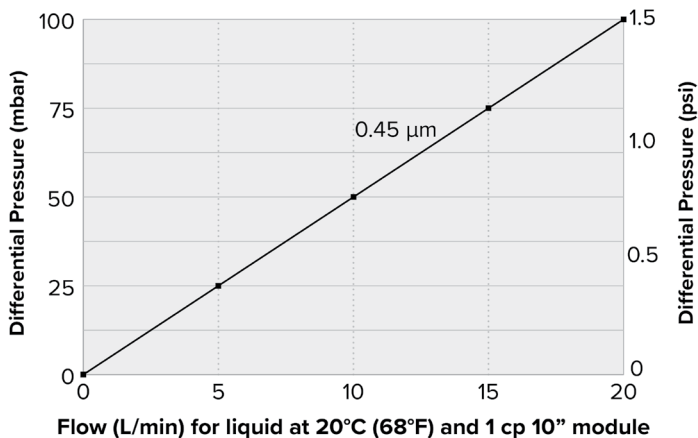
These cartridges offer an integrated pre-filter layer and a 33% larger filtration surface area than our standard ScottCart Membrane (PES) cartridges. This offers higher flow rates, greater resistance to fouling, and a longer service lifetime. These cartridges are especially well-suited for high-throughput applications.

*Please note: the integrated pre-filter layer does not replace the need for pre-filtration or pre-membrane cartridges, it simply extends the lifetime of the final cartridge.*

### FEATURES

- Can be integrity tested
- Can be chemically regenerated
- Compatible with pH range of 1-14
- Integrated depth pre-filtration layer
- High filtration area

### PERFORMANCE CHARACTERISTICS



### SPECIFICATIONS

#### MATERIALS OF CONSTRUCTION

CARTRIDGE AREA	MATERIAL
FILTRATION MEMBRANE:	Polyethersulphone
PRE-FILTER LAYER:	Polyester
UPSTREAM SUPPORT:	Polyester
DOWNSTREAM SUPPORT:	Polyester
SUPPORT CORE:	Polypropylene
OUTER PROTECTION CAGE:	Polypropylene
END CAPS:	Nylon
END CAP INSERT:	316L Stainless Steel
O-RINGS:	Silicone

#### FOOD CONTRACT COMPLIANCE



Materials conform to the relevant requirements of 21CFR Part 177, current EC1935 / 2004 and current USP Plastics Class VI - 121°C (249.8°F) and ISO10993 equivalents.

#### EFFECTIVE FILTRATION AREA (EFA)

10" (250 mm)	Up to 0.8m <sup>2</sup> (8.61 ft <sup>2</sup> )
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#### RECOMMENDED OPERATING CONDITIONS

Up to 70°C (158°F) continuous operating temperature and higher short-term temperatures during CIP to the following limit

TEMPERATURE		MAX. FORWARD dP	
°C	°F	BAR	PSI
20	68	5.0	72.5
40	104	4.0	58.0
60	140	3.0	43.5
80	176	2.0	29.0
90	194	1.0	14.5
> 100 (steam)	> 212 (steam)	0.3	4.0



**CLEANING AND STERILIZATION**

ScottCart Membrane PES Pro cartridges can be repeatedly steam sterilized in-situ or autoclaved at a maximum temperature of 130°C (266°F). However, **we recommend steam sanitizing up to 121°C (250°F) for 20 minutes** to prolong the lifespan of the cartridge.

They can be sanitized with hot water at up to 90°C (194°F) and are compatible with a wide range of chemicals. Please refer to our Directions for Use document or contact Scott Laboratories for more information.

**RETENTION CHARACTERISTICS**

The retention characteristics of ScottCart Membrane PES Pro filters have been validated by challenges performed with the following organisms.

ORGANISM	LRV when challenged with a minimum of 10 <sup>7</sup> cfu per cm <sup>2</sup>
	0.45
<i>Saccharomyces cerevisiae</i>	FR
<i>Brettanomyces bruxellensis</i>	FR
<i>Lactobacillus brevis</i>	FR
<i>Acetobacter oeni</i>	FR
<i>Serratia marcescens</i>	FR

\*FR - Fully retentive during challenge

**INTEGRITY TEST DATA**

All filters are flushed with pharmaceutical grade purified water prior to dispatch. They are integrity tested to the following limits:

TEST PARAMETERS	MICRON RATING
	0.45
<b>DIFFUSIONAL FLOW</b>	
Test Pressure (bar)	1.4
Test Pressure (psi)	20.0
Max. Diffusional Flow per 10" (ml/min)	21.0
<b>BUBBLE POINT</b>	
Test Pressure (bar)	2.0
Test Pressure (psi)	29
<b>PRESSURE HOLD</b>	
Test Pressure (bar)	1.6
Test Pressure (psi)	23

**MANUFACTURING TRACEABILITY**

Each filter element displays the product description, product code and lot number. Additionally each filter module displays a unique serial number providing full manufacturing traceability.

**ORDERING INFORMATION**

- 0.45 micron, 30" Code 7, item number: 7845073PRO