

Mem-PLEAT SG & Pur-MAXX SG

Sterilizing Grade Pleated Polyethersulfone Membrane

- ▶ DIAGNOSTICS
- ▶ LARGE VOLUME PARENTERALS
- ▶ BUFFER SOLUTIONS
- ▶ CELL CULTURE PURIFICATION
- ▶ FINAL FILTRATION OF WFI AND CIP WATER
- ▶ VACCINES



ORDER GUIDE



Strainrite's **Sterilizing Grade Pleated Polyethersulfone Membrane Cartridges** are engineered to meet the highest standards of microorganism control for sterile fluids. These filter elements are validated for complete removal of *Brevundimonas diminuta* (ATCC 19146) at test concentrations of 10⁷ CFU/cm² (Colony Forming Units).

This product is ideally suited for applications where microorganism contamination causes product defects or extra processing time due to increase fluid instability. These cartridges are produced utilizing a unique multi-pleated configuration integrating highly asymmetric and hydrophilic polyethersulfone membrane with exceptional pleat support materials. This novel multi-pleated approach increases cartridge life, strength and durability, and allows our filter cartridges to withstand multiple sterilization cycles without sacrificing product integrity.

These cartridges comply with FDA CFR Title 21 and USP Biological Reactivity for Class VI Plastics. By combining these ultra pure components with the low protein binding features of highly asymmetric hydrophilic polyethersulfone membrane makes them perfect for applications in the biopharmaceutical and bottled water industries.



- ▶ VALIDATED 0.2 μm ABSOLUTE RATED MEMBRANE CONFIGURATION
- ▶ HIGH SURFACE AREA MEMBRANE OFFERS EXCELLENT LIFE AND FLUX RATES WHILE PROVIDING ABSOLUTE FILTRATION
- ▶ ABSOLUTE-RATED DUAL LAYER MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ▶ PLEAT DESIGN FOR GREATER SURFACE AREA: LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ▶ 100% THERMALLY BONDED CONSTRUCTION
- ▶ INTEGRITY TESTED
- ▶ HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI AUTOCLAVE AND HOT WATER SANITIZATION CYCLES
- ▶ 316 SS REINFORCED END TREATMENTS
- ▶ ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21 AND ARE BIO-SAFE IN ACCORDANCE WITH USP CLASS VI
- ▶ VALIDATION GUIDE AVAILABLE ON REQUEST

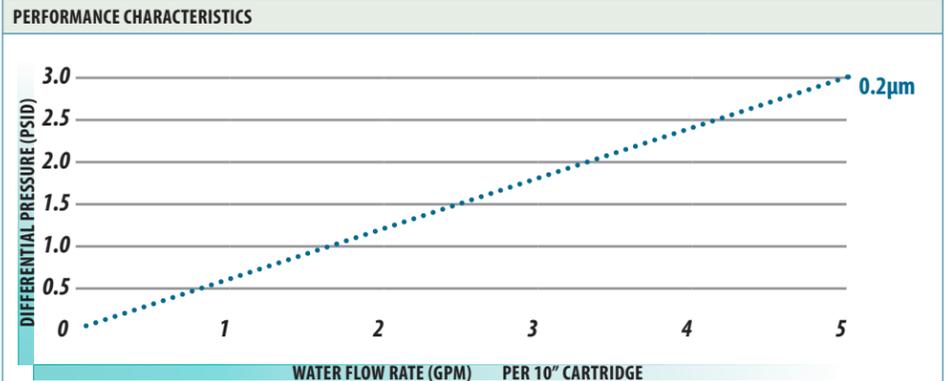
NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat SG and Pur-MAXX SG, the following vessel types are most commonly used:

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As always, discuss your options with your local sales representative to find the best fit for your application.

ABSOLUTE RATED RETENTION			
0.2			
MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		Reverse: 50 psid (3.4 bar) @ 75°F (24°C)	
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty Polypropylene			
TOXICITY			
Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact			
STERILIZATION			
Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C) Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton 10 inch - 24 per carton 20 inch - 12 per carton 30 inch - 12 per carton 40 inch - 9 per carton			
FILTER MEDIA	END CAPS/ CAGE/CORE	PLEAT SUPPORT MATERIAL	REINFORCING RING
Polyethersulfone	Polypropylene	Polypropylene	316 Stainless Steel
SEALS		CONSTRUCTION METHOD	
Buna N Fluorocarbon EPDM Silicone		Thermal Bond	
OUTSIDE DIAMETER		APPROXIMATE SURFACE AREA	
MPESG: 2.55" (6.48cm) PRMXESG: 2.7" (6.87cm)		6.5 square feet per 10" equivalent	
LENGTHS			
5 inch (12.7 cm) 10 inch (25.4 cm) 20 inch (50.8 cm) 30 inch (76.2 cm) 40 inch (102 cm)			
INTEGRITY TEST VALUES			
PORE SIZE	BUBBLE POINT	TEST PRESSURE	AIR DIFFUSION
0.2-SG	50 psig	40 psig	≤16mL/min
USP PHYSIOCHEMICAL TESTS FOR PLASTICS			
Ultrapure water extracts from multiple lots of cartridges were tested and shown to have values that comply with USP limits			
TEST	RESULTS	USP LIMIT	
Non volatile residue Heavy Metals Residue on Ignition Buffering Capacity	<2mg <1ppm <2mg <1mL	<15mg <1ppm <5mg <10ml	



ORDER OPTIONS

CARTRIDGE	
MPE PRMXE	Mem-Pleat E (2.55") Pur-MAXX E (2.7")
MICRON RATINGS	
0.2	
CARTRIDGE LENGTH	
5, 10, 20, 30, 40	
PLEAT SUPPORT	
PP	Polypropylene
END CAP CONFIGURATIONS	
C3 C6 C7 C8	Flat/222 Flat/226 Fin/226 Fin/222
GASKET/O-RING MATERIAL	
S B V E	Silicone Buna N Fluorocarbon EPDM
CARTRIDGE GRADE	
SG	Sterilizing Grade