

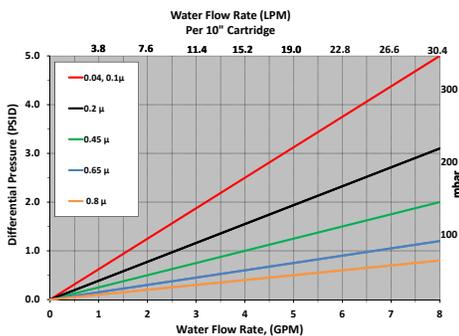
High Purity - Food and Beverage Grade PES

Hydrophilic Polyethersulfone (PES) Membrane Developed for the Food and Beverage Industry

Food and Beverage Grade PES Cartridges have been designed to comply with all FDA requirements for the food industry. The polyethersulfone membrane exhibits low protein-binding characteristics; making the GFPEs series an excellent choice for fermented beverage applications. Each cartridge is flushed with high purity DI water and 100% integrity tested to ensure the delivery of clean effluent as well as low extractables. The Extended Area option (GFPEsX) offers up to 40% more surface area. This additional area results in significant increases in flowrate and loading capacity in the same footprint.

The 0.2 micron cartridge has been validated with *Brevundamonas diminuta* and exhibits a Log 7 reduction (10^7 organisms/cm²) of the bacteria. Additionally, the 0.45 micron cartridge has been validated with *Serratia marscecens* and also shows a Log 7 reduction (10^7 organisms/cm²) of the bacteria.

Flow Rate vs Pressure Drop



* Data represents GFPEs. For GFPEsX option, multiply given flowrate by 1.4.



Construction Materials

Membrane Polyethersulfone
Support Media Polypropylene
End Caps Polypropylene
Center Core Polypropylene
Outer Support Cage Polypropylene
O-Rings/Gaskets Buna, EPDM, Silicone, Viton®, Teflon® Encapsulated Viton®

Sanitization/Sterilization

Filtered Hot Water 80°C for 30 min.
Steam Sterilization 121°C for 30 min., multiple cycles

Chemicals: Cartridges are chemically compatible with most chemicals and sanitizing agents.

Note: Stainless steel insert option needed for all cartridges being hot water sanitized or steam sterilized.

Typical Applications

- Wine
- Beer
- Juices
- Soft Drinks
- Bottled Water

Dimensions

Length: 10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter: 2.70 inches (7.0 cm) nominal

Maximum Recommended Operating Conditions

Temperature 176°F (80°C)

Maximum Differential Pressures

Forward 50 PSI (3.4 bar) at 20°C
Reverse 40 PSI (2.7 bar) at 20°C

FDA Listed Materials

Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations.

Toxicity

All polypropylene components meet the specifications for biological safety per USP Class VI – 121°C for plastics.

Ordering Information

GFPEs	Rating (μ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
GFPEsX	0.04		10" (25.4 cm)		2 = DOE Flat Gasket	B = Buna		I = Stainless Steel Insert
	0.1		20" (50.8 cm)		3 = 222 w/ Fin	E = EPDM		CS = 316ss Compression Spring
	0.2		30" (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone		
	0.45		40" (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton®		
	0.65				7 = 226 w/ Fin	T = Teflon® Encapsulated Viton®		
	0.8				16 = 213 Internal O-Ring	Z = Teflon® Encapsulated Silicone		

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.