

Filter Data Sheet

High Purity - Wine and Beverage Grade PES

Hydrophilic Polyethersulfone (PES) Membrane Developed Specifically for the Wine and Beverage Industries

Wine and Beverage Grade PES cartridges remove all yeast and significantly reduce microorganisms prior to wine and beverage bottling. The removal of spoilage organisms is of critical importance. By incorporating a polypropylene prefiltration stage, Global Filter's GBPES series filter cartridges provide exceptional retention of these organisms, while delivering long service life. Each cartridge is flushed to 18 MΩ with high purity water and 100% integrity tested to ensure the delivery of clean effluent as well as low extractables.

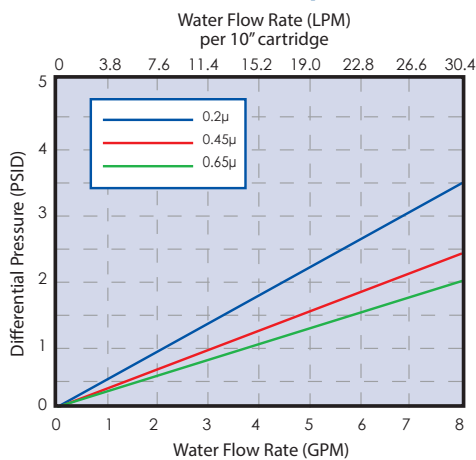


Multi-log Microbiological Reduction

Rating	Challenge Microorganism	LRV
0.45μ	Serratia marcescens	6.6
0.65μ	Lactobacillus plantarum and Saccharomyces cerevisiae	10

* Results of testing in accordance with ASTM F838 "Determining Bacterial Retention of Membrane Filters Utilized for Liquid Filtration".

Flow Rate vs Pressure Drop



Construction Materials

Membrane.....Polyethersulfone
Support MediaPolypropylene
PrefilterPolypropylene
End Caps.....Polypropylene
Cages and CoresPolypropylene
O-Rings/Gaskets.....Buna, EPDM, Silicone, Viton®, Teflon® Encapsulated Viton®

Sanitization/Sterilization

Filtered Hot Water.....88°C at 5 PSI
Steam Sterilization:
 121°C for 30 min. (@ 2 PSI up to 40 cycles)
 121°C for 60 min. (@ 2 PSI up to 25 cycles)

Chemicals: Peracetic acid, chlorinated alkaline products, bleach, sulfur dioxide and hydrogen peroxide at typical sanitization concentrations and temperatures.

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

Maximum Recommended Operating Conditions

Temperature.....176°F (80°C)

Dimensions

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

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.

Typical Applications

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

Ordering Information

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