

## GPES-Series Wine and Beverage Grade Polyethersulfone

GPES-Series High Purity Wine and Beverage Grade Polyethersulfone Filter Cartridges are optimized for the requirements of the wine and beverage industry. The polyethersulfone membrane offers high flux density and low protein-binding and maintains the organoleptic characteristics of the treated product, making it an ideal choice for production of consumables. Cartridges are flushed with ultra-high purity water to achieve the most stringent requirements for extractable substances. Designed to tolerate repeated hot water sanitization and *in situ* steam sterilization cycles for maximum service life. Each element is integrity tested to ensure optimal performance. Manufactured in a clean-room environment to maintain high standards of purity and cleanliness.

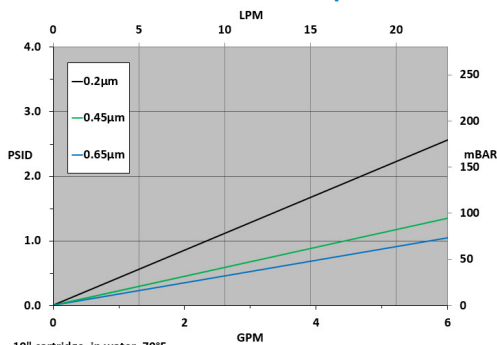


### Microbial Retention Performance

Rating	Challenge Microorganism	LRV
0.2μ	<i>Serratia marcescens</i>	6.5
0.45μ	<i>Sacchromyces cerevisiae</i>	6.6
0.65μ	<i>Sacchromyces cerevisiae, Lactobacillus</i>	7.8

\* Independently tested in accordance with ASTM F838.

### Flow Rate vs Pressure Drop



10" cartridge, in water, 70°F

### Ordering Information

GPES	Rating (μ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
	0.2		10" (25.4 cm)		2 = DOE Flat Gasket	B = Buna		CS = 316SS Compression Spring
	0.45		20" (50.8 cm)		3 = 222 w/ Fin	E = EPDM		I = Stainless Steel Insert
	0.65		30" (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone		
			40" (101.6 cm)		6 = 226 w/ Flat Cap	T = Teflon® Encapsulated Viton®		
					7 = 226 w/ Fin	Z = Teflon® Encapsulated Silicone		
					28 = 222 3-tabs w/ Fin	V = Viton®		

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. For additional technical support, a product Performance Guide is available upon request.

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### Typical Applications

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

### Construction Materials

**Membrane**..... Polyethersulfone  
**Support Media**..... Polypropylene  
**End Caps**..... Polypropylene  
**Cages and Cores**..... Polypropylene  
**O-Rings/Gaskets**..... Buna, EPDM, Silicone, Teflon® Encapsulated Silicone, Teflon® Encapsulated Viton®, Viton®

### Sanitization/Sterilization

**Hot Water**.....85-95°C, 30 min., max dP 7 PSI  
**Steam Sterilization** ..... 134°C for 30 min., max dP 7 psi, multiple cycles

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

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

### Dimensions

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

### Operating Conditions

**Change Out ΔP (recommended)**.....35 PSID  
**Temperature (max)**.....176°F (80°C)  
**Differential Pressure (max)** .....72 PSID  
 (5.0 bar) at 68°F (20°C)

### Toxicity

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

### Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are deemed safe for use in contact with foodstuffs in accordance with EU Directives 1935/2004, and/or 10/2011.