

GBPES-Series Wine and Beverage Grade Polyethersulfone

GBPES-Series High Purity Wine and Beverage Grade Polyethersulfone Filter Cartridges are optimized for the requirements of the wine and The polyethersulfone beverage industry. 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.



Construction Materials

Membrane	Polyethersulfone
Support Media	Polypropylene
End Caps	Polypropylene
Outer Support Cages	Polypropylene
O-Rings/Gaskets	Buna, EPDM, Silicone,
	FKM, FEP FKM, FEP Silicone

Dimensions

Length	25.4 1	to 101.	6 cm
Outside Diameter		7.	0 cm

Operating Conditions

Change Out ΔP (recommended))2,4 ba
Temperature (max)	80°C
Differential Pressure (max)	5 har at 20°C

Toxicity

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

Food Safety Compliance

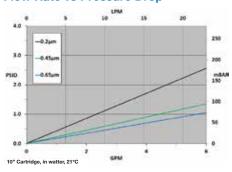
Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are deemed safe for use in contact with foodstuffs in accordance with EU Directives 1935/2004 and/or 10/2011.

Microbial Retention Performance

Rating	Challenge Microbe	Log Reduction Value (LVR)		
.2μ	Serratia marcescens	6.5		
.45μ	Sacchromyces cerevisiae	6.6		
.65μ	Sacchromyces cerevisiae, Lactobacillus	7.8		

^{*}Independently tested in accordance with ASTM F838

Flow Rate vs Pressure Drop



Sanitization/Sterilization

Filtered Hot Water	85°-95°C for 30 min.
	max ∆P 0.5 bar
Steam Sterilization	134°C for 30 min.,
	max ΛP 0.5 har 100 cycles

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

Note: All cartridges provided standard with an integral reinforcement ring to prevent deformation of the o-ring adapter during steam sterilization or hot water sanitization processes.

Typical Applications

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

Ordering Information

GBPES	Rating(µ)	Α	Length	С	End Cap Style	O-Rings/Gaskets	-	Adders
	0.2		10" (25.4cm)		2 = DOE Flat Gasket ¹²	B = Buna-N		CS = 316SS Compression Spring
	0.45		20" (50.8 cm)		3 = 222 w/Fin	E = EPDM		
	0.65		30" (76.2 cm)		4 = 222 w/Flat Cap	S = Silicone		
			40" (101.6 cm)		6 = 226 w/Flat Cap	T = FEP FKM		
					7 = 226 w/Fin	V = FKM		
					28 = 222 3-Tabs w/ Fin	Z = FEP Silicone		

^{1 -} When ordering with DOE Flat Gasket, gasket style "T" is not available

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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^{2 -} When ordering with DOE Flat Gasket, gasket style "Z" is not available