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. Global Filter’s GBPES series filter cartridges provide exceptional retention of these organisms, while delivering long service life. Each cartridge is flushed to 18 MQ with high purity water and 100% integrity tested to ensure the delivery of clean effluent as well as low extractables.

**Multi-log Microbiological Reduction**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Challenge Microorganism</th>
<th>LRV</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2μ</td>
<td>Serratia marcescens</td>
<td>&gt;7</td>
</tr>
<tr>
<td>0.45μ</td>
<td>Lactobacillus lindneri</td>
<td>&gt;7</td>
</tr>
<tr>
<td>0.65μ</td>
<td>Saccharomyces cerevisae</td>
<td>&gt;7</td>
</tr>
</tbody>
</table>

*Results of testing in accordance with ASTM F338 “Determining Bacterial Retention of Membrane Filters Utilized for Liquid Filtration”.

**Construction Materials**

- Membrane: Polyethersulfone
- Support Media: Polypropylene
- End Caps: Polypropylene
- Cages and Cores: Polypropylene
- O-Rings/Gaskets: Buna, EPDM, Silicone, Viton®, Teflon® Encapsulated 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, 100 cycles

**Maximum Recommended Operating Conditions**

- **Temperature:** 176°F (80°C)

**Maximum Differential Pressures**

- **Forward:** 72 PSI (5.0 bar) at 68°F (20°C)
- **Reverse:** 29 PSI (2.0 bar) at 176°F (80°C)

**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

**Flow Rate vs Pressure Drop**

**Dimensions**

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

**Ordering Information**

<table>
<thead>
<tr>
<th>GBEPS</th>
<th>Rating (μ)</th>
<th>A</th>
<th>Length (cm)</th>
<th>C</th>
<th>End Cap Style</th>
<th>O-Rings/Gaskets</th>
<th>Adders</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>10” (25.4)</td>
<td>B</td>
<td>C</td>
<td>2 = DOE Flat Gasket</td>
<td>B = Buna</td>
<td>CS = 316ss Compression Spring</td>
<td></td>
</tr>
<tr>
<td>0.45</td>
<td>20” (50.8)</td>
<td>C</td>
<td>B</td>
<td>3 = 222 w/ Fin</td>
<td>E = EPDM</td>
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<td></td>
</tr>
<tr>
<td>0.65</td>
<td>30” (76.2)</td>
<td>D</td>
<td>C</td>
<td>4 = 222 w/ Flat Cap</td>
<td>S = Silicone</td>
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<td></td>
</tr>
<tr>
<td>0.65</td>
<td>40” (101.6)</td>
<td>E</td>
<td>C</td>
<td>6 = 226 w/ Flat Cap</td>
<td>V = Viton®</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.