

# **Memtrex\* MP-B**

## FACT SHEET

## Pleated Filters with Polyethersulfone Membrane



Figure 1: Memtrex MP-B Filter

### Description and Use

Memtrex MP-B (MMP-B) filters (Figure 1) offer a PES membrane specifically designed for beverage applications. MMP-B cartridge filters exhibit the low protein-binding, high flow rates, and high throughputs that are crucial for today's demanding beverage process. Every filter is 100% integrity tested. As industry standards rise and new precautions are taken to ensure product purity, you can rely on Veolia MMP-B filters to provide reliable filtration for all your beverage applications—bottled water, beer, wine, liquor, fruit juices, and fountain drinks.

The MMP-B filter is just one example of our strong commitment to the beverage industry. Our complete portfolio includes filters for every stage of processing, and we offer custom solutions for your unique applications. Veolia is your complete source for filters, crossflow membranes, housings, and other filtration equipment.

### **Typical Applications**

Memtrex-MP-B filters are specifically designed for beverage filtration. Typical applications include final filtration of:

- Wine
- Beer
- Fruit Juices
- Bottled Water

### **General Properties**

Memtrex MP-B filters are available the following absolute pore size micron ratings: 0.2, 0.45, and 0.65  $\mu m.$  Tables 1, 2, 3, 4, and 5 show further details on materials of construction, dimensions, operational limits, integrity testing, and flow performance.

**Table 1: Materials of Construction** 

Media	Hydrophilic Polyethersulfone Membrane		
Prefiltration Media	Polypropylene Microfiber		
Support Layers	Polypropylene Microfiber		
Core and Cage	Polypropylene		
Endcaps and Adapters	Polypropylene		

**Table 2: Dimensions** 

Nominal O.D	Nominal I.D	Effective Filtration Area	
2.75" (70mm)	1.25" (31mm)	6.6ft <sup>2</sup> (0.62m <sup>2</sup> )	

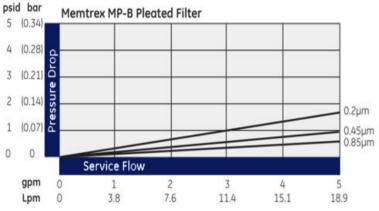
**Table 3: Operational Limits** 

Maximum Forward Differential Pressure	60 psi (4.1 bar) @ 70°F (21°C)
Maximum Reverse Differential Pressure	30 psi (2.1 bar) @ 70°F (21°C)
Maximum Operating Temperature	180°F (82°C) at 10 psid (0.7 bar) in water

**Table 4: Integrity Testing** 

Pore Size Rating	Specification		
0.2 μm	≤ 19 cc/min at 30 psi (2.07 bar)		
0.45 μm	≤ 16 cc/min at 20 psi (1.38 bar)		
0.65 μm ≤ 12 cc/min at 13 psi (0.90 bar)			
Air diffusion per 10" module after saturation with clean water			

Table 5: Flow Performance in Clean Water<sup>1</sup>



<sup>1</sup>Data based on 10" length filter

**Table 6: Ordering Information** 

Туре	Absolute Micron Rating	Nominal Cartridge Length	End #1 Adapter	End #2 Adapter	Elastomer Material	Grade
MMP	92 = 0.2 μm 94 = 0.45 μm 96 = 065 μm	1 = 10 inch (25.4cm) 2 = 20 inch (50.8cm) 3 = 3- inch (76cm) 4 = 40 inch (101.5 cm)	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring E = 222 O-Ring F = 226 O-Ring J = 020 O-Ring Q = 222 O-Ring Stainless Steel Insert	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring G = Closed End Cap H = Fin Adapter	B = Buna-N E = EPDM S = Silicone V = Viton <sup>2</sup>	B= Beverage
			Q = 222 O-Ring			

<sup>&</sup>lt;sup>2</sup>Viton (Trademark of Dupont)

#### **Additional Information**

- Memtrex MP-B filters may be autoclaved or in situ steam sterilized (up to 257°F [125°C] 30-minute cycles) for a maximum accumulated exposure of 10 hours. Alternatively, the filters may be sanitized with compatible chemical agents.
- Veolia certifies that the materials contained in its Memtrex MP-B pleated filters meet US FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact Veolia technical services. Memtrex MP-B filters meet the test criteria for USP Class VI-121°C Plastics.
  - Aqueous extracts from Memtrex MP-B filters contain less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues. Veolia Filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your Veolia distributor for more information.
- Table 6 provides more information on ordering Memtrex MP-B filters.

