

BPVWB Micro Capsule filters consist of a single layer, hydrophobic, high capacity polyvinylidene fluoride (PVDF) membrane. These filters are used for bioburden control in non-aqueous liquids, for air/gas applications and for tank vents. These hydrophobic filters deliver high flow and throughput with the broad chemical compatibility of a fluoropolymer. Pore sizes range from 0.22 to 1.0  $\mu m$ , and are available presterilized.

Critical Process provides unrivaled delivery times, technical consulting before purchasing, and very competitively priced high-performance products. Our comprehensive testing & analysis and validation services support your team whenever they need it. Your process experts partnering with our filtration experts is how we deliver your company's solution right the first time.

# Bioburden Control

Tank Vent & Process Gas

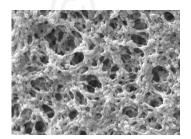


MICRO CAPSULES - Nominal Dimensions

Body Length: 1.9 in. (4.8 cm)

Overall Length: 2.8 to 3.8 in. (7.1 to 9.7 cm)

Outside Diameter: 2.6 in. (6.6 cm)



PVDF is the recommended media for bioburden control in:

- Fermentation Air
- Compressed Air
- Tank Vents
- Solvents
- Non-Aqueous Solutions

## **Maximum Operating Parameters**

	MICRO CAPSULES	_
Liquid Operational Pressure	80 psi at 68 °F (5.52 bard at 20 °C)	
Gases Operational Pressure	60 psi at 68 °F (4.14 bar at 20 °C)	
Operating Temperature (water)	110 °F at 30 psid (43 °C at 2.07 bard)	
Forward Differential Pressure	Liquid - 80 psid at 68 °F (5.52 bard at 20 °C) Gas - 60 psi at 68 °F (4.14 bar at 20 °C)	
Reverse Differential Pressure	50 psid at 68 °F (3.45 bard at 20 °C)	Cit
Recommended Changeout Pressure	35 psid (2.41 bard)	

#### Sanitization & Sterilization

Autoclave*	250 °F (121 °C), 30 min, 5+ cycles	
Chemical Sanitization	Performed using industry standard concentrations of hydrogen peroxide,	
	peracetic acid, sodium hypochlorite and other selected chemicals.	

#### **Endotoxins**

The levels of bacterial endotoxins in aqueous extracts from BPVWB Micro Capsule filters are below current USP limits as specified for water for injection.

#### **Extractables**

BPVWB Micro Capsule filters typically exhibit low levels of non-volatile residues.

#### Non-Fiber Releasing

The BPVWB Micro Capsule filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters.

## **FDA Compliance**

Materials meet the requirements listed by the FDA as appropriate for use in articles intended for repeated food contact as specified in Title 21 CFR sections 174.5, 177.1500, 177.1520, 177.1630, 177.2440, and 177.2600 as applicable.

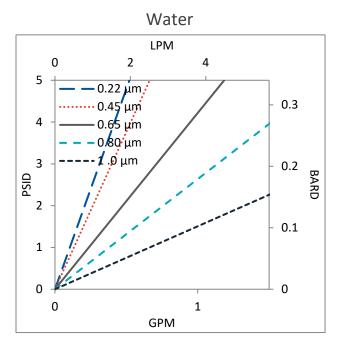
## Filtration Area (Nominal)

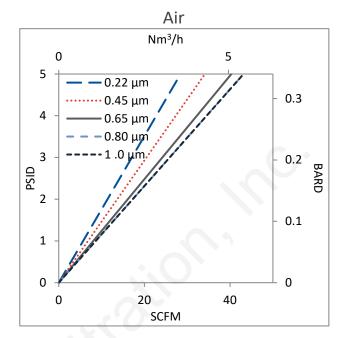
Area	0.569 ft <sup>2</sup>	
	529 cm <sup>2</sup>	

#### **Construction Materials**

Filtration Media	Hydrophobic High Capacity Polyvinylidene Fluoride (PVDF) Membrane
Media Support	Polypropylene
End Caps, Center Core, Outer Support Cage, Capsule Housing	Polypropylene
Sealing Method	Thermal Bonding
O-Rings/Gaskets Cartridges only	Buna, Viton® (or FKM), EPDM, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)

## Flow Rates for BPVWB Micro Capsules by Pore Size



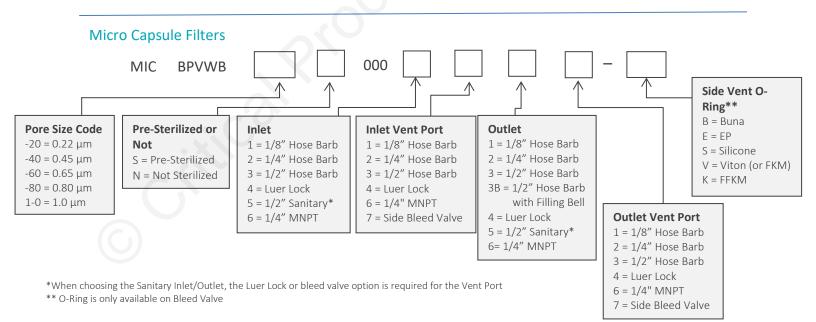


Flow rates for Micro Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a Micro capsule filter with ½" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the Micro capsule.

## **BPVWB Micro Capsule Filters Ordering Information**

All Critical Process filters are configurable to meet customer specifications. Fill in the corresponding codes in the boxes below to build your Part Number.

To consult with one of our technical team members, request a quote or place an order: call (603) 880-4420 Ext. 106, or send an email to <a href="mailto:sales@criticalprocess.com">sales@criticalprocess.com</a>





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Data Sheet BPVWB Micro DS Rev -