



## EPD Mini-Capsule Filters

Pleated Polypropylene Depth Media



EPD Mini-Capsule filters are constructed with pleated Polypropylene Depth Media for prefiltering critical process liquids including water, chemicals and solvents. Products are designed to meet the needs of the electronics and high-purity chemical industries. Pore sizes range from 0.10 to 100  $\mu\text{m}$ . Other filter devices scale from laboratory to full production using identical materials to ensure consistent results.

These filters have superior retention and protect downstream filters and processes by removing large amounts of particulate and other contaminants. They are rated at 99.9% efficiency at the indicated pore size. Designed for high capacity and long life, the EPD Mini-Capsule is a very cost-effective filter.

EPD Mini-Capsule filters are pulse power flushed until the rinse effluent reaches 18+ Megohm-cm and less than 3ppb TOC.

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.

### Fine Particle Removal

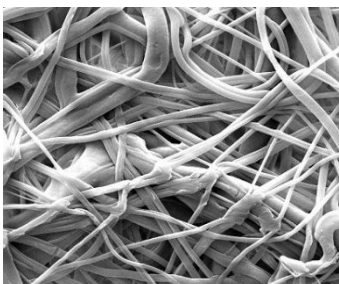


#### MINI-CAPSULES – Nominal Dimensions

Body Length: 2.85 in. (7.2 cm)

Overall Length – 3.75 to 5.19 in. (9.5 to 13.2 cm)

Outside Diameter: 2.95 in. (7.5 cm)



EPD Mini-Capsule filters are recommended for fine particle removal in:

- Ultrapure DI Water
- Chemicals
- Acids & Bases
- Plating Solutions
- Etch Baths
- Solvents

## Maximum Operating Parameters

	MINI-CAPSULES
<b>Liquid Operational Pressure</b>	80 psi at 68 °F (5.52 bard at 20 °C)
<b>Gases Operational Pressure</b>	60 psi at 68 °F (4.14 bar at 20 °C)
<b>Operating Temperature (water)</b>	110 °F at 30 psid (43 °C at 2.07 bard)
<b>Forward Differential Pressure</b>	50 psid at 68 °F (3.45 bard at 20 °C)
<b>Reverse Differential Pressure</b>	40 psid at 68 °F (2.76 bard at 20 °C)
<b>Recommended Changeout Pressure</b>	35 psid (2.41 bard)

## Sanitization & Sterilization

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

## Filtration Area (Nominal)

	Pleated Depth Media
	0.46 ft <sup>2</sup>
Area	413 cm <sup>2</sup>

## Construction Materials

<b>Filtration Media</b>	Pleated Polypropylene Depth Media
<b>Media Support</b>	Polypropylene
<b>End Caps, Center Core, Outer Support Cage, Mini-Capsule Housing</b>	Polypropylene
<b>Sealing Method</b>	Thermal Bonding

## Extractables

EPD Mini-Capsule filters typically exhibit low levels of non-volatile residues.

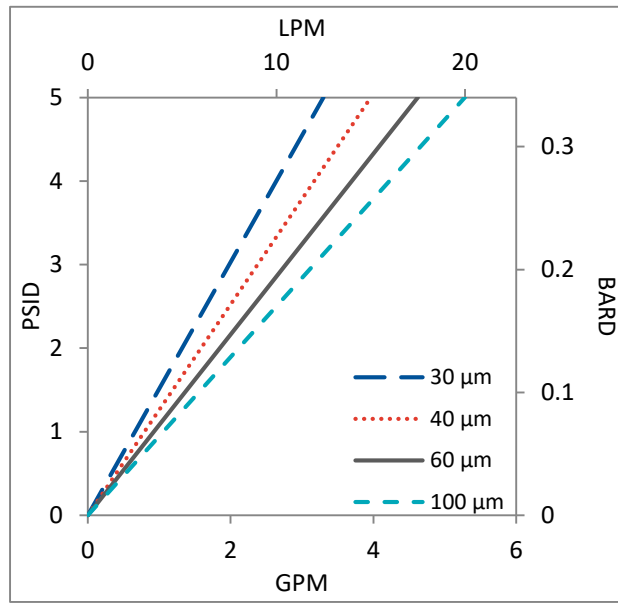
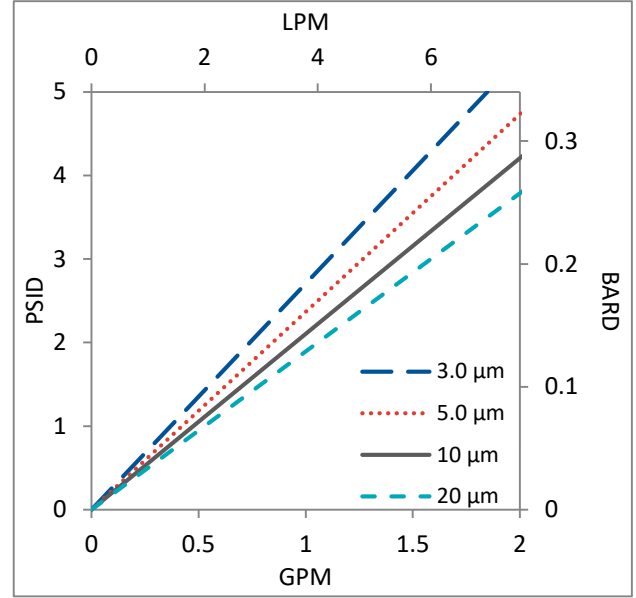
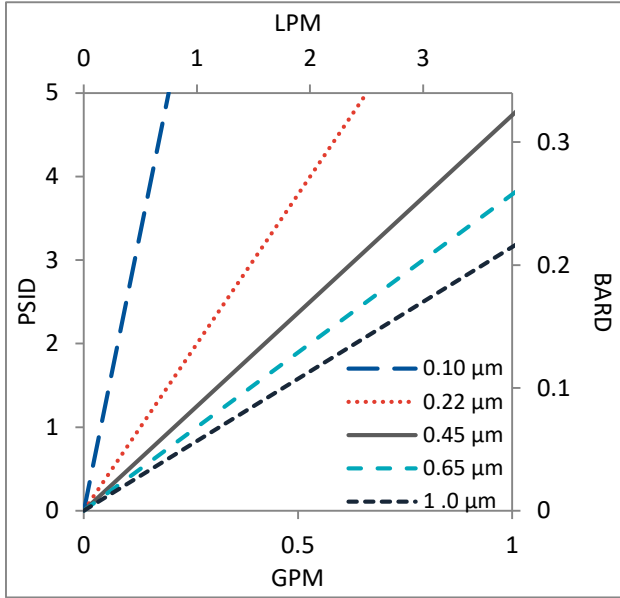
## TOC and Conductivity

EPD Mini-Capsule filter water effluent conforms with the TOC and water conductivity standards of SEMI Standard F63 after an appropriate flush with ultrapure water.

## Non-Fiber Releasing

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

## Flow Rates for EPD Mini-Capsules by Pore Size



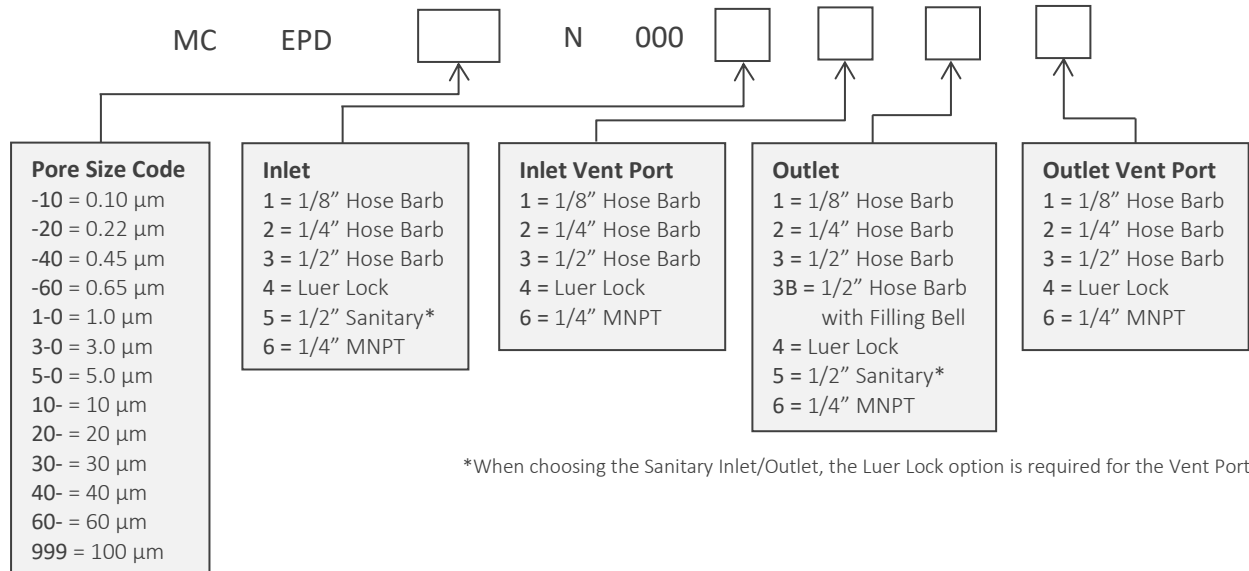
Flow rates for Mini-Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a mini-capsule filter with 1/2" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the mini-capsule.

## EPD Mini-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 [sales@criticalprocess.com](mailto:sales@criticalprocess.com)

### Mini-Capsule Filters



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Data Sheet EPDMiniDS Rev-