



## HPPD Micro Capsule Filters

Pleated Polypropylene Depth Media

HPPD Micro Capsule filters are constructed with pleated Polypropylene depth media for prefiltering critical pharmaceutical and healthcare liquids including water, chemicals and solvents. Pore sizes range from 0.10 to 3.0  $\mu\text{m}$  and filter sizes scale from laboratory to full production using identical materials to ensure consistent results.

Designed for high capacity, these hydrophilic filters have superior retention and protect downstream filters by removing large amounts of particulate and other contaminants. HPPD Micro Capsule filters are rated at 99.9% efficiencies at the indicated pore size.

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.

### Clarification & Prefiltration

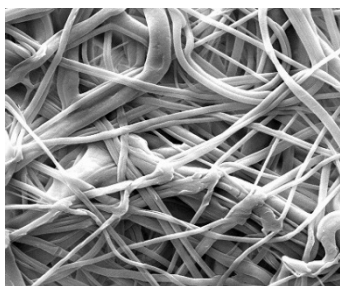


#### MICRO CAPSULES – Nominal Dimensions

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)



HPPD Micro Capsule filters are recommended for clarification & prefiltration in:

- Chemicals
- Intermediates
- Buffers
- WFI, Water Purification
- Medications
- Ophthalmics
- Diagnostics
- Device Cleaning

## Maximum Operating Parameters

| MICRO 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>  | Liquid - 80 psid at 68 °F (5.52 bard at 20 °C)<br>Gas - 60 psi at 68 °F (4.14 bar at 20 °C) |
| <b>Reverse Differential Pressure</b>  | 50 psid at 68 °F (3.45 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. |

## Endotoxins

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

## Extractables

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

## TOC and Conductivity

HPPD Micro Capsule filters conform with TOC standards of USP <643> and the water conductivity standards of USP <645> after an appropriate flush with purified water.

## Toxicity Compliance

Materials used to construct HPPD Micro Capsule filters are non-toxic and meet the requirements for the MEM Elution Cytotoxicity Test and the requirements for Biological Reactivity Tests in the current version of the United States Pharmacopeia (USP) for Class VI - 121 °C Plastics.

## Non-Fiber Releasing

HPPD 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.

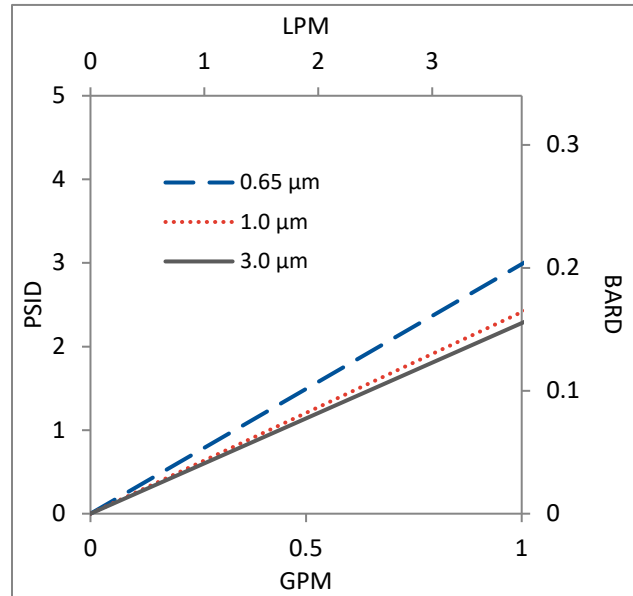
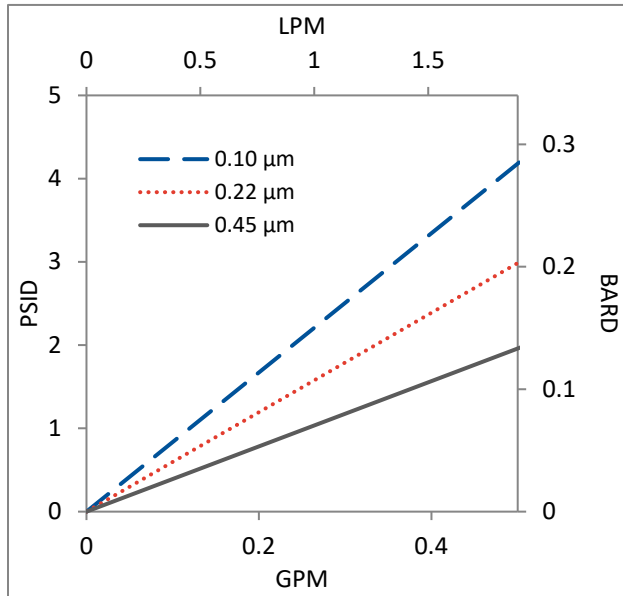
## Filtration Area (Nominal)

|      |                       |
|------|-----------------------|
| Area | 0.498 ft <sup>2</sup> |
|      | 462 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, Micro Capsule Housing</b> | Polypropylene                     |
| <b>Sealing Method</b>   | Thermal Bonding                   |

## Flow Rates for HPPD Micro Capsules by Pore Size



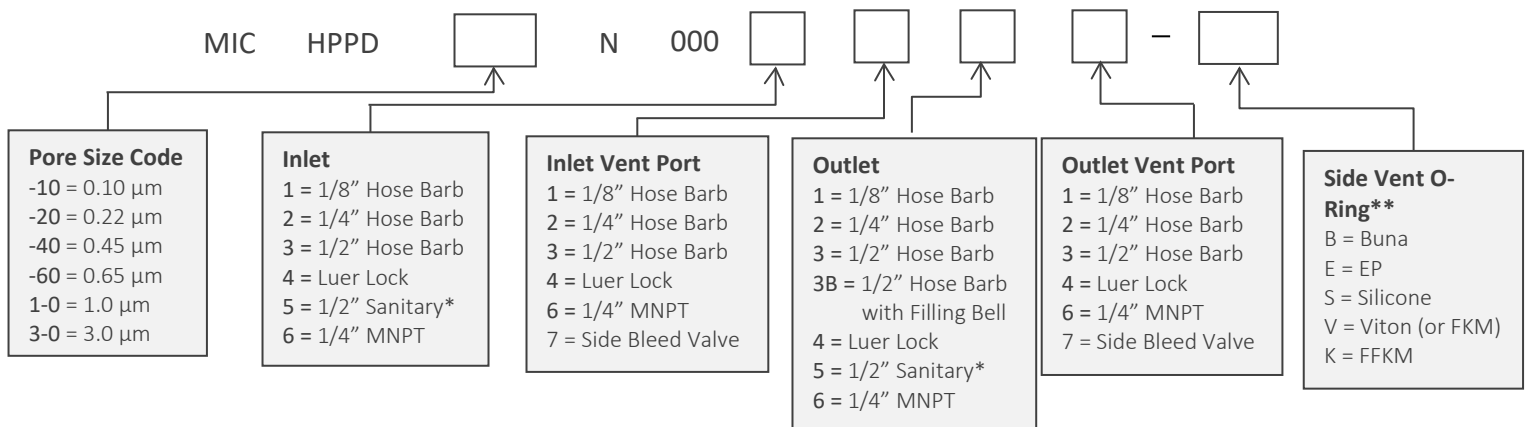
Flow rates for Micro Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a Micro capsule filter with 1/2" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the Micro capsule.

## HPPD 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 [contact us here](#).

### Micro Capsule Filters



\*When choosing the Sanitary Inlet/Outlet, the Luer Lock or bleed valve option is required for the Vent Port

\*\* O-Ring is only available on Bleed Valve



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