

# PGD Mini-Capsule Filters

## Pleated Fiberglass Depth Media



PGD Mini-Capsule filters are constructed with fiberglass depth media for clarification and prefiltration of aqueous liquids. Pore sizes range from 0.22 to 5.0  $\mu\text{m}$ . Additional filter devices scale from laboratory to full production using identical materials to ensure consistent results.

Designed to meet FDA requirements, PGD Mini Capsules are manufactured to ensure fiber free effluent. They are rated at 99% retention at the indicated pore size. PGD filters offer the benefits of high flow rates, high contaminant holding capacity as well as excellent retention. These hydrophilic, high capacity filters are used in pre-filter applications as well as final filter applications where the goal is bioburden reduction and not sterile product. PGD Mini-Capsules are available pre-sterilized.

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

### Particle Filtration

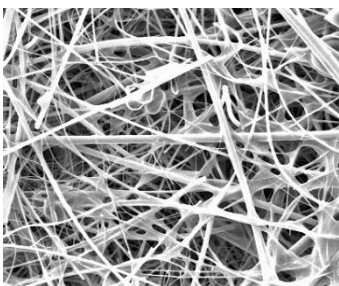


#### MINI-CAPSULES – Nominal Dimensions

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)



PGD Mini Capsules are recommended for clarification & prefiltration in:

- Intermediates
- Buffers & Growth Media
- Bulk Pharmaceutical Chemicals
- LVPs & SVPs
- WFI, Water Purification

## 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

	Pleated Depth Media
Area	0.41 ft <sup>2</sup>
	381 cm <sup>2</sup>

## Construction Materials

<b>Filtration Media</b>	Pleated Fiberglass 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

## Endotoxins

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

## Extractables

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

## TOC and Conductivity

PGD Mini 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 PGD Mini 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.

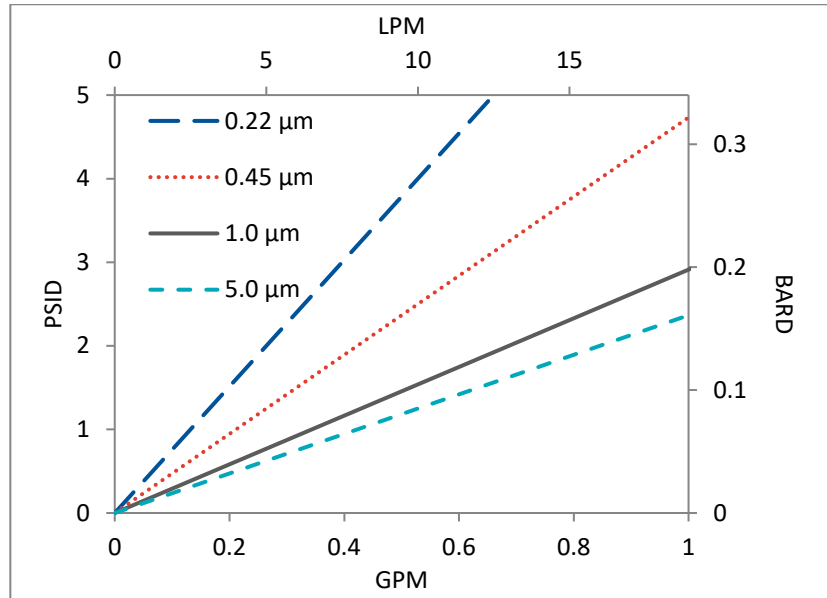
## Non-Fiber Releasing

PGD Mini 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.

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



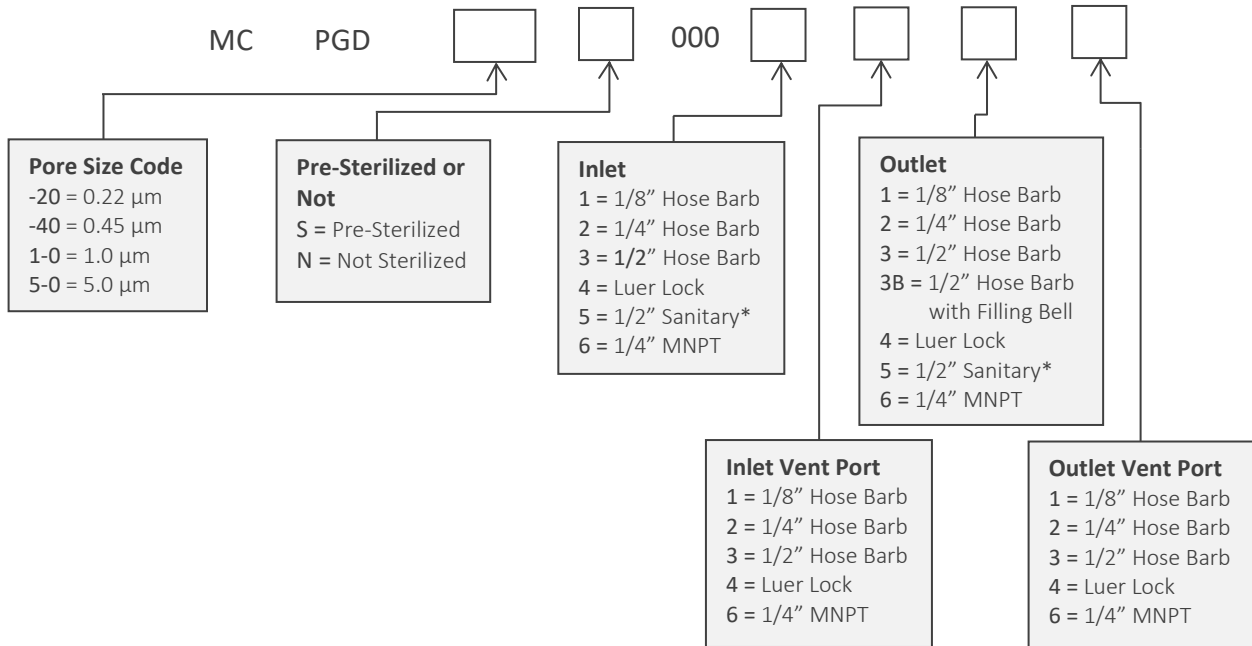
Flow rates for Mini-Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a mini-capsule filter with ½" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the mini-capsule.

## PGD 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) 880-4220 Ext. 106, or send an email to [sales@criticalprocess.com](mailto:sales@criticalprocess.com)

### Mini-Capsule Filters



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



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