

SUPAPORE TP

Pleated Membrane Filter Cartridge



SupaPore TP Microfiltration cartridges have been designed specifically for use in a wide range of aggressive gas and liquid processing applications. Its naturally hydrophobic PTFE membrane makes this cartridge an ideal choice for systems requiring excellent compatibility, reliability and a consistently high quality filtrate.

Product Features

SupaPore TP cartridges feature:

- A naturally hydrophobic PTFE membrane
- 0.2µm rated filter in liquids and 0.02µm in gases
- Polypropylene support
- Minimal fibre migration

*(*0.02 micron retention has been validated using MS-2 phage as a challenge organism. However, gas filtration theory (MPPS, Most Penetrating Particle Size) indicates that retention down to much lower levels e.g. 0.003 micron, would be expected for this filter)*



- Wide chemical compatibility
- Validation by bacterial and aerosolised bacteriophage challenge
- Junior cartridge available

All cartridges are thermally bonded and adhesive free. Each unit is pre-flushed with ultra-pure water and integrity tested before final assembly.*

- Can be steam sterilised
- Sanitisable
- Meet current US FDA CFR Title 21 requirements
- Fully integrity testable by Water Intrusion, Bubble Point or Diffusion Flow test*¹
- All B grade modules are integrity tested during manufacture

Available in a wide range of grades & absolute rated pore sizes:

- 0.1, 0.2, 0.45, 1.0µm and solvent grade
- General Grade
- Biological Grade

Suitable for most sanitisation regimes including steaming, autoclaving, hot water flush and most common sanitising agents.

(Note: Steaming, autoclaving and hot water sanitisation must use the Reinforced Polypropylene End Cap option)



Amazon Filters manufactures a comprehensive range of filter housings for SupaPore TP cartridges including the industrial 50 and 60 Series and the 70 Series for hygienic applications. Please consult our Sales Office for further details on the full range.

Features and Benefits

- Fully Integrity Testable - Water Intrusion, Bubble Point and Diffusional Flow values provided for biological grade pore sizes*¹
- Validated*² removal ratings for consistent and reliable performance
- Naturally hydrophobic PTFE membrane and polypropylene hardware
- Thermal bonding process eliminates adhesives and ensures minimal extractables
- Identification mark on every cartridge
- Full product validation guide available
- All individual packing bags are anti static
- Meets current US FDA CFR Title 21 requirements

¹B grade only ² See product guides for further details stating test method and rated efficiencies

Industries and Applications

- | | |
|--------------------------|--|
| Food and Beverage | • CO ₂ lines, Sterile vent for storage and transfer tanks |
| Pharmaceutical | • Solvent filtration, polishing |
| Fine Chemicals | • Polymers, Aggressive acids, Bases, Solvents, Ozonated DI Water |
| Electronics | • Photoresists, Acids, Etch Solutions |

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SupaPore TP Technical Data

Dimensions

	Standard 10"	Junior 5"	Junior 2"
Outside Diameter:	71mm	56mm	56mm
Typical Surface Area:	0.75m ²	0.25m ²	0.12m ²
Length:	See ordering guide		

Sterilisation and Sanitisation*3

Steam or Autoclave: 135°C for >150 hours

*3Applies to single open end cartridges only. For all steaming and hot water applications, the Reinforced Polypropylene End Cap option must be used.

Maximum Operating Conditions

Temperature: 80°C (for intermittent exposure to air)
60°C (for continuous exposure to air)

Recommended Maximum Differential Pressure:

Forward Flow: 5.0 bar @ 20°C
Reverse Flow: 3.0 bar @ 20°C

Recommended change-out differential pressure: 2.5 Bar

Product validation guide available on request. All SupaPoreTP cartridges are manufactured under strict control with batch number identification, giving full traceability on all components.

Standard Materials of Construction

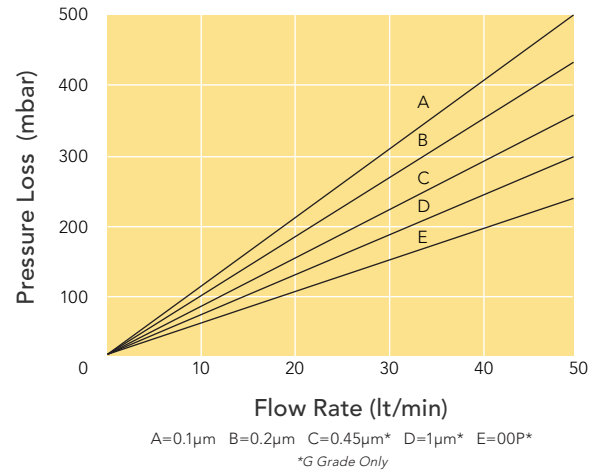
Filter Media: Polytetrafluoroethylene (PTFE)
Media Support: Polypropylene
End caps: Polypropylene
Cages/Core: Polypropylene

Integrity Test Specification

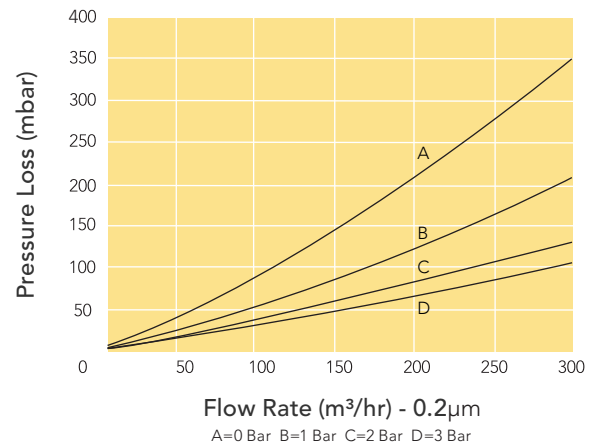
B Grade

Micron Rating	Bubble Point In 60/40 IPA/Water	Diffusion Flow (cc/min/10") In 60/40 IPA/Water	Water Intrusion Flow (cc/10 mins/10")
0.10µm	≥ 1500mbar (22 psi)	-	-
0.2µm	≥ 1000mbar (14.5 psi)	≤ 11 @ 700mbar	≤ 13 @ 2500mbar

Water Flow Rates



Air Flow Rates



Ordering Guide

16TP	B	002 -	20	3	F	A	
Media	Grade	Micron Rating	Length	End Caps	Seal	Branding	Options
16TP - PTFE / Polypropylene	B - Biological G - General	001 - 0.10µm*8 002 - 0.20 004 - 0.45*5 010 - 1.0*5 00P - Solvent Grade*5	02 - 64mm (Junior) 05 - 122 (Junior) 05 - 124 (not 0.2µm) 05 - 143 (0.2µm only) 09 - 249 20 - 496 30 - 744 40 - 991	J - Junior 0 - DOE*5 A - Code A B - Code B*4 S - Code S 2 - Code 2 3 - Code 3 6 - Code 6*5 7 - Code 7 8 - Code 8 9 - Code 9*5	B - Buna E - EPDM F - FEP / Silicone (SOE Only) G - FEP / Viton S - Silicone T - PTFE V - Viton	A - Amazon	G - Reinforced Polypropylene End Cap*5 A - Millidisk Retrofit Adaptor *7 B - 1/2" BSPM Adaptor *7 C - Trueseal Retrofit Adaptor *7 D - Sartorius Code 15 Retrofit Adaptor*7

Example: 16TPB002-203FA = PTFE media with polypropylene core, Biological Grade, 0.2µm in liquid, 0.02µm in gas, double length 20" long, Code 3 end fitting with FEP/Silicone seal.

*4 Code B - to fit Amazon 50 Series housings only

*5 TPG Only

*6 Standard on Junior Cartridges

*7 Junior filters only *8 Not available for Junior Cartridges

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