# SUPAPORE CAPSULES



SupaPore microfiltration membrane capsules are fully disposable filter units for small and medium scale liquid and gas processing applications. They are ready-to-use, avoiding the need to purchase or maintain filter housings and are easy to change-out with minimum downtime. The filtration unit is permanently enclosed inside the capsule shell to minimise post-use cleaning and operator exposure to process fluids.

SupaPore capsules are available with pleated PES (polyethersulphone) or PTFE membranes and offered with a range of inlet/outlet connections to suit most process systems.

The filters are supplied in a wide range of lengths from 50mm to 750mm long.

## SupaPore VC Capsules

- Naturally hydrophilic PES membrane
- Low protein binding
- 100% polypropylene hardware
- Available in a range of Absolute removal ratings
- Integrity testable
- Presterilised option available (gamma irradiated at minimum 25 kG)



### **SupaPore TC** Capsules

- Naturally hydrophobic PTFE membrane
- 100% polypropylene hardware
- Available in a range of Absolute removal ratings
- Integrity testable

### **Product Features**

- Thermally bonded and adhesive free construction
- Capsules are non-pyrogenic and can be autoclaved
- Materials meet US FDA CFR Title 21 requirements
- Available in a range of grades and pore sizes
- Manufactured in clean room facilities under ISO quality system

## Features and Benefits

- Fully disposable unit avoids the need to purchase a filter housing
- Presterilised option provides maximum convenience
- Ready to use for easy filter change-out and minimum downtime
- Enclosed filter unit minimises operator exposure and post-use cleaning
- Wide range of inlet and outlet connections available so suitable for most process systems
- All polymer construction
- Full product validation guide available

## Industries and Applications

- Development and pilot plant applications
- Equipment requiring filtration e.g. laboratory water treatment systems, printing equipment etc
- Hospital critical water applications e.g. endoscope washing machines, dialysis equipment
- Venting and process air filtration
- Manufacturers of small or medium size batches of products where batch to batch cleaning is an issue
- Multi-purpose plants where flexibility is needed



## SupaPore Capsules Technical Data

Outside Diameter: 90mm

Filter Module Length	Nominal Capsule Length (Hose Barb connections)	Typical Surface Area	Capsule Volume (Litre)
50mm (2")	127mm	0.09m <sup>2</sup>	0.23
125mm (5")	220mm	0.28m²	0.57
250mm (10")	339mm	0.65 - 0.70m <sup>2</sup>	1.0
500mm (20")	582mm	1.3 - 1.40m <sup>2</sup>	1.9
750mm (30")	824mm	1.95 - 2.10m <sup>2</sup>	2.8

## Sterilisation and Sanitisation \*Applies to non gamma sterilised option only

Autoclave: 127°C for 30 mins (multiple cycles)

Hot Water: Up to 90°C

## **Maximum Operating Conditions**

Maximum Temperature: 43°C @ 2.0 Bar

Maximum Pressure: 5.5 Bar @ 20°C (Liquid)

4.1 Bar @ 20°C (Gas)

Max Differential Pressure: 3.4 Bar @ 20°C (Forward Flow)

2.7 Bar @ 20°C (Reverse Flow)

Recommended change-out differential pressure: 2.5 Bar

### **Materials of Construction**

Filter media: V - Polyethersulphone (PES) or

T - Polytetrafluoroethylene (PTFE)

Media Support: Polypropylene Capsule Assembly: Polypropylene

Vent and Drain Valves: Polypropylene Luer-Lok

### **Bacterial Challenge**

16VCB002: LRV>10<sup>11</sup> (Brevundimonas diminuta (ATCC 19146)) 16VCB004: LRV>10<sup>8</sup> (Serratia marcescens (ATCC 14756))

Validation guide and Integrity test data available on request. All **SupaPore** capsules are manufactured under strict control with batch number identification, giving full traceability on all components.

Pressure Loss (mbar) 300 200 8 VC Flow Rates (lt/min) A=0.03μm B=0.1μm C=0.2μm D=0.45μm E=0.65-1.2μm 600 500 Pressure Loss (mbar) 400 300 200

3 4 5 6 7 TC Flow Rates (lt/min)

 $A=0.1\mu m~B=0.2\mu m~C=0.45\mu m~D=1/3\mu m$ 

Flow Rates For Water (2" Capsule)

В

900

400

100

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