# SUPAPORE VPBA

# Extended Life Biological Grade Membrane

SupaPore VPBA cartridges features a high flow, highly Asymmetric PES Polyethersulphone membrane with a built in pre-filter. The supporting pre-filter layer and membrane combination improves on stream life and dirt holding capacity and is ideally suited to the demands Pharmaceutical industry.

The enhanced throughput capabilities especially suit processes where long on-stream life is vital, minimising the cost of filtration whilst maintaining product quality. The low binding characteristics of PES make this product an ideal choice for the filtration of products with low levels of active ingredients such as preservatives in Ophthalmics and proteins in Biotech products.

Amazon's SupaPore VPBA cartridges can be in-situ steam sterilised and superior chemical resistance allows the cartridges to be repeatedly cleaned for a longer service life.

#### **Applications**

Microbiological sterilisation and bioburden control in larger scale production facilities.



#### **Cartridge Construction**

The cartridge assembly is thermally bonded and adhesive free. Each unit is pre-flushed with ultra-pure water and integrity tested before final assembly.

- Meets current USP Class VI requirements
- Meets US requirements for materials intended to come into contact with food as described in CFR Title 21
- Meets the requirements for food contact as detailed in European Regulation (EC) Number 1935/2004
- Full product validation guide available

Amazon Filters manufactures a comprehensive range of filter housings for the SupaPore VPBA cartridge in both industrial and hygienic formats in sizes up to 30 x 40" filters.

Please consult our Sales Office for further details on the full range.

### Features and Benefits

- Naturally hydrophilic PES membrane
- Built in integral pre-filter layer
- 5 to 40" length options with a range of common end caps
- Comprehensive validation guide available
- Low binding for minimal active ingredient loss
- Excellent chemical compatibility
- Can be regenerated for extended service life
- Can be repeatedly integrity tested
- Range of removal ratings and validated for consistent and reliable performance

(Note: steaming, autoclaving and hot water sanitisation must use the Reinforced PP end-cap option)

\*1 See product guides for further details stating test method and rated efficiencies

## Industries and Applications

**Pharmaceuticals** 

- Sterile filtration of LVP and SVP's
- Oral medications
- Buffer solutions
- **Ophthalmic** Eye drops and Ointments

**Fine Chemicals** 

- Solvents
- Aqueous and Organic Bulk Feeds



## SupaPore VPBA Technical Data

#### **Dimensions**

Outside Diameter: 68.5mm

Typical Surface Area: 0.65m² (Per 10")
Length: See ordering guide

#### Sterilisation and Sanitisation\*1

Steam or Autoclave: 121°C for 60 mins (240 cycles)

135°C for 30 mins (25 cycles)

Hot Water:  $90^{\circ}$ C for 30 mins (0.2 bar  $\Delta$ p max)

 $^{\star}1$  Applies to single open end cartridges only. For all steaming and hot water applications, the Reinforced end cap option must be used

#### **Maximum Operating Conditions**

Temperature: 80°C

Recommended Maximum Differential Pressure: Forward Flow: 4.0 Bar @ 20°C Reverse Flow: 3.5 Bar @ 20°C

#### **Materials of Construction**

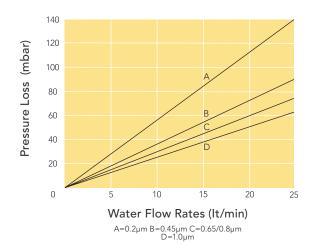
Filter Media: Polyethersulphone (PES)
Pre Filter: Polyethersulphone
Media Support: Polypropylene
End Caps: Polypropylene
Cage/Core: Polypropylene

#### **Bacterial Challenge**

16VPBA02: LRV>11 (Brevundimonas diminuta (ATCC 19146) 16VPBA04: LRV>8 (Serratia marcescens (ATCC 14756)

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

#### Flow Rates (10" Element)



#### **Integrity Test Specification**

Micron Rating	Minimum Bubble Point In Water	Diffusion Flow (cc/min/10") In Water			
0.2µm	3030mBar (44 psi)	≤ 30 @ 2410mBar			
0.45µm	1720mBar (25 psi)	≤ 30 @ 1380mBar			
0.65µm	1310mBar (19 psi)	≤ 30 @ 1030mBar			
0.8µm	1030mBar (15 psi)	≤ 30 @ 830mBar			
1.0µm	690mBar (10 psi)	≤ 30 @ 550mBar			

## Ordering Guide

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Media	Core/Assembly	Micron Rating	Length	End Caps	Seal	Branding	Options
16VP - Polyethersulphone / Polypropylene 16VD - Polyethersulphone / Polypropylene Cage and End Caps, Reinforced Polypropylene Core	BA - Integral Prefiltration Layer	02 - 0.20µm 04 - 0.45 06 - 0.65 08 - 0.80 10 - 1.0	05 - 125mm 09 - 251 20 - 510 30 - 757 40 - 1016	0 - DOE A - Code A B - Code B*3 S - Code S 2 - Code 3 6 - Code 6 7 - Code 7 8 - Code 8 9 - Code 9	B - Buna E - EPDM F - FEP/Silicone S - Silicone V - Viton	A - Amazon	G - Reinforced Polypropylene End Cap

Example: 16VPBA04-208SA = Polyethersulphone media with polypropylene core, Biological Grade, 0.45µm, double length 20″ long, Code 8 end fitting with Silicone seal. <sup>13</sup> Code B - to fit Amazon 50 Series housings only

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