# SUPAPORE VP



## PLEATED MEMBRANE CARTRIDGE

**SUPAPORE VP** Microfiltration cartridges use a pleated high surface area Polyethersulphone membrane that has been designed for use in a wide range of liquid processing applications. The naturally hydrophilic PES membrane contains no wetting agents and has very low levels of extractables making this cartridge an ideal choice for systems requiring a reliable and consistent highquality filtrate.

#### **Product Features**

**SUPAPORE VP** cartridges feature:

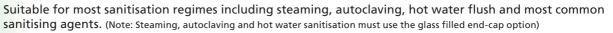
- A naturally hydrophilic PES membrane
- Low protein-binding characteristics
- Exceptionally high flow rates with low clean pressure losses
- Bacterial retention data with LRVs using Brevundimonas Diminuta and Serratia Marcescens
- Wide chemical compatibility

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

- Fast rinse-up time to 18 Megohm-cm\*<sup>1</sup>
- Non Pyrogenic\*2
- Materials meet US FDA Title 21 and USP Class VI requirements
- Meets the requirements for food contact as detailed in European Regulation (EC) Number 1935/2004
- Meet current USP requirements for extractables

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

- General Grade
- Electronics Grade
- Biological Grade



Amazon Filters manufactures a comprehensive range of filter housings for **SUPAPORE VP** 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.



## SUPAPORE VP FEATURES AND BENEFITS

- Validated\*<sup>3</sup> removal ratings for consistent and reliable performance
- Fully Integrity Testable Bubble Point and Diffusional Flow values provided for all pore sizes\*1
- Pleated PES membrane that exhibits exceptionally low protein-binding characteristics
- High surface area giving high flow rates and low initial pressure losses
- Wide chemical compatibility, meet FDA requirements
- Range of integrity testable ratings from 0.03 to 1.0µm (depending on grade)
- Thermal bonding process eliminates adhesives and ensures minimal extractables
- Identification mark on every cartridge
- Full product guide available
- \*1 E grades only \*2 B grades only
- \*3 See product guides for further details stating test method and rated efficiencies

### **TECHNICAL DATA**

#### **Dimensions**

Outside Diameter: 68.5mm

Typical Surface Area: 0.65m<sup>2</sup> - 0.75m<sup>2</sup> (Per 10") Length: See ordering guide

#### Sterilisation and Sanitisation\*4

Steam or Autoclave: 121°C for 15 mins (40 cycles) Hot Water: 90°C for 30 mins (0.2 bar  $\Delta p$  max) \*4Applies to single open end cartridges only. For all steaming and hot water applications, the Glass Filled 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

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

#### **Materials of Construction**

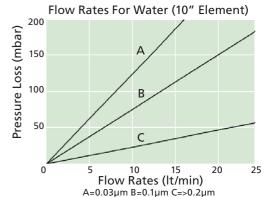
Filter Media: Polyethersulphone (PES) P - Polypropylene (PP) Cage, Core & End Caps:

D - Polypropylene Cage and Endcaps,

Glass Filled PP Core

#### **Bacterial Challenge**

16VPW002: LRV>10<sup>11</sup> (Brevundimonas diminuta (ATCC 19146)) 16VPW004: LRV>10<sup>8</sup> (Serratia Marcescens (ATCC 14756))



#### **INTEGRITY TEST SPECIFICATION**

#### E and B Grades

Micron Rating	Bubble Point In Water	Diffusion Flow (cc/min/10") In Water
0.03µm	5172mBar (75 psi)	≤ <b>30 @ 4138mBar</b>
0.1µm	4140mBar (60 psi)	≤ 30 @ 3310mBar
0.2µm	3030mBar (44 psi)	≤ 30 @ 2410mBar
0.45µm	1720mBar (25 psi)	≤ <b>30</b> @ <b>1380</b> mBar
0.65µm	1310mBar (19 psi)	≤ 30 @ 1030mBar
0.8µm	1030mBar (15 psi)	≤ <b>30</b> @ <b>830</b> mBar
1.0µm	690mBar (10 psi)	≤ 30 @ 550mBar

## Ordering Guide

16 MEDIA



**VP - Polyethersulphone** 

/ Polypropylene

VD - Polyethersulphone

/ Polypropylene Cage

and Endcaps, Glass

Filled PP Core



B - Biological

E - Electronics

G - General

GRADE



00A - 0.03µm

001 - 0.10

002 - 0.20

004 - 0.45

006 - 0.65

008 - 0.80 010 - 1.0











30 - 757 40 - 1016

## CONNECTIONS 0 - DOE

A - Code A B - Code B\*5 S - Code S

2 - Code 2 3 - 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

SEAL

**OPTIONS** G - Glass filled PP end cap

A

Example: 16VPG004-303SA = Polyethersulphone media with polypropylene core, General Grade, 0.45µm, triple length 30" long, Code 3 end fitting with Silicone seal.

\*5 Code B - to fit Amazon 50 Series housings only

#### INDUSTRIES AND APPLICATIONS

**Pharmaceuticals Fine Chemicals Electronics** 

Cosmetics

- Sterile filtration, WFI, Opthalmics, Oral medications, Large volume parenterals
- Aqueous and Organic bulk feeds, Solvents, Bubble jet inks
- High purity water, Polishing loop return lines, Point of use
- Alcohol, Mouthwashes, Make up water

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