# SUPAPORE VPWS



### Superior Life Beverage Grade Filter

In beverage manufacturing it is important that products are microbiologically stabilised prior to packaging to prolong shelf life. This needs to be achieved without affecting the nature of the product and in a cost effective manner. Therefore minimising the cost of stabilisation whilst maintaining beverage quality remains a constant driver. In response to this industry need, Amazon has developed SupaPore VPWS filters using an advanced asymmetric PES membrane optimised for beverage applications. This provides superior throughputs, without affecting taste, aroma or colour. It is ideal for processes where long on-stream life is vital.

Amazon's **SupaPore VPWS** cartridges can be in-situ steam sterilised and offer excellent chemical resistance enabling the cartridges to be repeatedly cleaned for a longer service life.

#### **Applications**

Clarification and microbiological stabilisation in production of Wines, Bottled Water and other beverages.



#### **Cartridge Construction**

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

- Meets 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
- Robust design allows multiple regenerations and sanitisations
- Full product validation guide available

Amazon Filters manufactures a comprehensive range of filter housings for SupaPore VPWS 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

- High surface area asymmetric membrane optimised for beverage applications offering superior throughputs
- Utilises naturally hydrophilic PES membrane providing low adsorption of protein, colour and flavour components
- Cartridge exhibits wide chemical compatibility and can be regenerated for extended service life
- Repeatedly integrity testable to assure consistent performance throughout their service life
- Range of removal ratings and validated\* for consistent and reliable performance
- Suitable for most sanitisation regimes including steaming, autoclaving, hot water flush and most common sanitising agents

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

### Industries and Applications

Wineries • Reduction of spoilage organisms

**Soft Drinks** • Sterile filtration of mineral water

Sterilisation of product make-up water

**General** • Yeast Reduction

Cold stabilisation prior to packaging

Sterilisation prior to bottling

Sterilisation of dealcoholised liquors

• Sterilisation of critical water



### SupaPore VPWS Technical Data

#### **Dimensions**

Outside Diameter: 71mm

Typical Surface Area: 0.7 - 0.8m² (Per 10")

#### Sterilisation and Sanitisation\*1

Steam or Autoclave: 110°C (100 cycles) 134°C (25 cycles)

Hot water:  $85-95^{\circ}\text{C}$  (100 cycles , 0.5 bar  $\Delta p$  max) <sup>1</sup>Applies 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: 5.0 Bar @ 20°C, 2.0 Bar @ 80°C

Reverse Flow 2.0 Bar @ 20°C

Recommended change-out differential pressure: 2.5 Bar

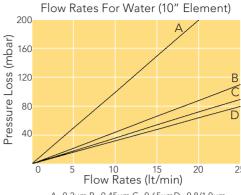
#### **Materials of Construction**

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

#### **Bacterial Challenge**

16VPWS02: LRV>7 (Brevundimonas diminuta) 16VPWS04: LRV>7 (Lactobacillus lindneri) 16VPWS06: LRV>6 (Lactobacillus lindneri) 16VPWS08: LRV>7 (Saccharomyces cerevisiae)

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



 $A=0.2\mu m~B=0.45\mu m~C=0.65\mu mD=0.8/1.0\mu m$ 

#### **Integrity Test Specification**

Micron Rating	Minimum Bubble Point in Water	Diffusion Flow (cc/min/10") In Water
0.2µm	3200mBar (46 psi)	≤ 21 @ 2500mBar
0.45µm	1900mBar (25 psi)	≤ 15 @ 1500mBar
0.65µm	1200mBar (19 psi)	≤ 13 @ 1000mBar
0.8µm	800mBar (15 psi)	≤ 8 @ 800mBar
1.0µm	800mBar (15 psi)	≤ 8 @ 800mBar

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