

SUPAPORE VPWS

Superior Life Beverage Grade Filter



In beverage manufacturing it is important that products are micro-biologically 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
- All individual packing bags are anti static

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

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

Industries and Applications

- | | |
|--------------------|--|
| Wineries | <ul style="list-style-type: none">• Reduction of spoilage organisms• Sterilisation prior to bottling |
| Soft Drinks | <ul style="list-style-type: none">• Sterile filtration of mineral water• Sterilisation of product make-up water |
| General | <ul style="list-style-type: none">• Yeast Reduction• Cold stabilisation prior to packaging• Sterilisation of dealcoholised liquors |
| Utilities | <ul style="list-style-type: none">• Sterilisation of critical water |

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SupaPore VPWS Technical Data

Dimensions

Outside Diameter: 71mm
 Typical Surface Area: 0.7 - 0.8m² (Per 10")

Sterilisation and Sanitisation*1

Steam or Autoclave: 121°C for 60 mins (up to 240 cycles)
 134°C for 30 mins (up to 25 cycles)

Hot water: Up to 95°C

*1 Applies 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
 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

Standard Materials of Construction

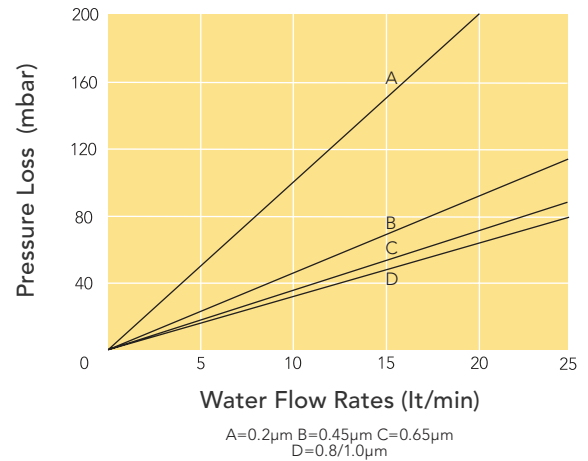
Filter Media: Polyethersulphone (PES)
 Media support: Polypropylene
 End Caps: Polypropylene
 Cage/Core: Polypropylene

Microorganism Removal Efficiency (per 10" cartridge)

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.

Flow Rates For Water (10" Element)



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

Ordering Guide

16VP	WS	04 -	30	3	S	A	
Media	Grade	Micron Rating	Length	End Caps	Seal	Branding	Options
16VP - Polyethersulphone / Polypropylene	WS - Beverage Grade	02 - 0.20µm 04 - 0.45 06 - 0.65 08 - 0.80 10 - 1.0	09 - 251mm 20 - 510 30 - 757 40 - 1016	A - Code A B - Code B*2 S - Code S 2 - Code 2 3 - Code 3 7 - Code 7 8 - Code 8	B - Buna E - EPDM S - Silicone V - Viton F - FEP / Silicone G - FEP / Viton	A - Amazon	G - Reinforced Polypropylene End Cap

Example: 16VPWS04-303SA = Polyethersulphone media with polypropylene core, Beverage Grade, 0.45µm, triple length 30" long, Code 3 end fitting with Silicone seal.
 *Code B - to fit Amazon 50 Series housings only

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16VPWS - Issue 01