

SUPAPORE VPWA

Extended Life Beverage Grade Membrane

Within the beverage industry, it is important that products are microbiologically stabilised prior to packaging to prolong shelf life and this is achieved without affecting the nature of the product.

Minimising the cost of stabilisation whilst maintaining beverage quality remains a constant driver. Amazon SupaPore VPWA is an advanced PES membrane filter cartridge with an integral membrane pre-filter layer designed to meet these requirements. This provides enhanced throughputs, especially for processes where long on-stream life is vital.

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

Applications

Clarification and microbiological stabilisation in larger scale production of Beers, 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, as well as the appropriate European guidelines
- Meets the requirements for food contact as detailed in European Regulation (EC) Number 1935/2004
- Meets current USP requirements for extractables
- Full product validation guide available

Amazon Filters manufactures a comprehensive range of filter housings for SupaPore VPWA 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 offering high flow rates and integral prefilter layer provides enhanced 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*1 for consistent and reliable performance
- Suitable for most sanitisation regimes including steaming, autoclaving, hot water flush and most common sanitising agents

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

*1 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 |
| Breweries | <ul style="list-style-type: none">• Yeast Reduction• Cold stabilisation prior to packaging• Sterilisation of Dealcoholised liquors |
| Soft Drinks | <ul style="list-style-type: none">• Sterile filtration of mineral water• Sterilisation of product make-up water |
| Utilities | <ul style="list-style-type: none">• Sterilisation of critical water |

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SupaPore VPWA Technical Data

Dimensions

Outside Diameter: 68.5mm
 Typical Surface Area: 0.65m² (Per 10")

Sterilisation and Sanitisation*2

Steam or Autoclave: 121°C for 60 mins (240 cycles)
 135°C for 30 mins (25 cycles)
 Hot Water: 90°C for 30 mins (0.2 bar Δp max)

*2 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: 4.0 Bar @ 20°C
 Reverse Flow: 3.5 Bar @ 20°C
 Recommended change-out differential pressure: 2.5 Bar

Standard Materials of Construction

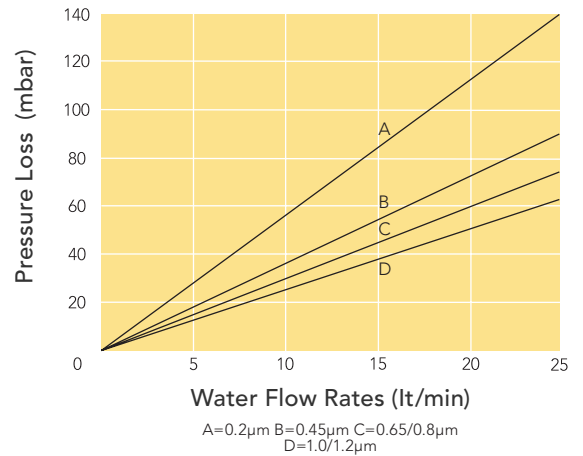
Filter Media: Polyethersulphone (PES)
 Media support: Polypropylene
 End Caps: Polypropylene
 Cage/Core: Polypropylene

Microorganism Removal Efficiency (per 10" cartridge)

16VPWA002: LRV >11 (*Brevundimonas diminuta* (ATCC 19146))
 16VPWA004: LRV >8 (*Serratia marcescens* (ATCC 14756))

Product validation guide available on request. All SupaPore VPWA 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
1.2µm	600mBar (9 psi)	≤ 30 @ 480mBar

Ordering Guide

16VP	WA	04 -	30	3	S	A	
Media	Grade	Micron Rating	Length	End Caps	Seal	Branding	Options
16VP - Polyethersulphone / Polypropylene 16VD - Polyethersulphone / Polypropylene Cage and End Caps, Reinforced Polypropylene Core	WA - Integral Prefiltration Layer	02 - 0.20µm 04 - 0.45 06 - 0.65 08 - 0.80 10 - 1.0 12 - 1.2	09 - 251mm 20 - 506 30 - 757 40 - 1016	0 - DOE A - Code A B - Code B ³ 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 S - Silicone V - Viton	A - Amazon	G - Reinforced Polypropylene End Cap

Example: 16VPWA04-303SA = Polyethersulphone media with polypropylene core, Beverage Grade, 0.45µm, triple length 30" long, Code 3 end fitting with Silicone seal.
³ Code B - to fit Amazon 50 Series housings only

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16VPWA - Issue 02