

Bevflo VK

- Easy to integrity test
- Extended effective filtration area
- Repeatedly steamable in situ
- Sanitisable and regenerable
- Thermowelded construction
- EC-listed materials for Food contact
- FDA-listed materials per CFR21



Bevflo VK pleated PES (Hydrophilic Polyethersulfone) membrane cartridges are specifically designed as a sterilising final filter for wine with a favorable cost benefit ratio and great performance in cold microbiological stabilisation.

The filter media is PES (Hydrophilic Polyethersulfone) membrane, pleated with upstream and downstream supports of polyester. The cartridges are steamable and sanitiser resistant and withstand regeneration cycles in hot water. Manufactured in a controlled environment, rigorous testing during the manufacturing process guarantees standards of high quality.

Materials of Construction

| | |
|---------------------|---------------------------|
| Filter media | Asymmetric PES membrane |
| Upstream supports | Polyester |
| Downstream supports | Polyester |
| Internal Core | Polypropylene |
| External Cage | Polypropylene |
| End caps / Adapters | Polypropylene / polyester |

Food Safety

Bevflo VK filter elements meet (EU) regulation 10/2011 and its subsequent amendments and regulations (EC) 1935/2004 and 1895/2005.

Quality of Standards

Produced under a certified Quality System to guarantee traceability of manufacturing records and integrity testing results.

Recommended wine flow rate l/h 10" cartridge

| Micron rating | $\Delta P = 0.1 \text{ bar}$ |
|--------------------|------------------------------|
| 0.2 μm | 400 |
| 0.45 μm | 500 |
| 0.65 μm | 500 |
| 0.8 μm | 550 |
| 1.2 μm | 550 |

Flow rates are indicative as they depend on the type of wine, sugar grade and pre-filtration treatment used.

Recommended Operating Conditions

- Maximum continuous temperature of 65°C
- Maximum cumulative time of steam sterilisation is 40 hours at 121°C with cycles of 30 minutes
- Sanitisation with hot water is 80°C max
- Sanitisation with chemicals - can be sanitised by standard chemical agents
- Maximum differential pressure is 5.0 bar at 25°C
- Recommended change out differential pressure is 2.0 bar at 25°C

| ABSOLUTE FILTRATION RATING IN LIQUIDS | ACCEPTABLE LIMIT FOR PRESSURE HOLD TEST | | TEST PRESSURE |
|---------------------------------------|---|----------------------|----------------|
| | Nr. 1 30" cartridge | Nr. 8 30" cartridges | |
| 0.2µm | 0.07 bar | 0.07 bar | 2.4 bar |
| 0.45µm | 0.1 bar | 0.1 bar | 1.1 bar |
| 0.65µm | 0.1 bar | 0.1 bar | 0.9 bar |
| 0.80µm | Not applicable | | Not applicable |
| 1.2µm | Not applicable | | Not applicable |

Bacterial Retention

| ABSOLUTE FILTRATION RATING (Micron) | BACTERIAL RETENTION FOR 10" CARTRIDGE |
|-------------------------------------|---|
| 0.2µm | ≥ 10 ¹⁰ Brevundimonas diminuta in liquid |
| 0.45µm | ≥ 10 ¹¹ Leuconostoc in liquid |
| 0.65µm | ≥ 10 ¹¹ Saccharomyces cerevisiae in liquid |
| 0.8µm | ≥ 10 ¹⁰ Saccharomyces cerevisiae in liquid |
| 1.2µm | Not applicable |

BEVFLO VK cartridges are proven to retain micro-organism reported in the table

Bevflo VK Ordering Guide

| Name | Micron Rating | Nominal Length | End Cap Type | Seal Type | Special |
|------|---------------|----------------|--------------|--------------|---------|
| VK | 0.2µm | 10" | 3 | E - EPDM | |
| | 0.45µm | 20" | 4 | S - Silicone | |
| | 0.65µm | 30" | 7 | | |
| | 0.80µm | 40" | 8 | | |
| | 1.2µm | | 28 | | |

Ordering Guide Example: VK-0.45-10-3S

European Manufacturing, Sales & Service
 Envirogen Group
 Unit 9, Wimsey Way, Alfreton Trading Estate,
 Alfreton, Derbyshire DE55 4LS,
 United Kingdom
 T: +(0)1531 636328
 E: info@envirogengroup.com

European Sales & Distribution
 Envirogen Technologies BV
 Penningweg 71, 1507 DG Zaandam,
 The Netherlands
 T: +31 (0)75 204 72 00
 E: ninfo@envirogengroup.com

Middle East Sales & Distribution
 Envirogen Group
 Block 115, Road 1510,
 Building 737, Office 81,
 Hidd, Kingdom of Bahrain
 T: +973 13107790
 E: infobahrain@envirogengroup.com