

Kleenpak Capsules with Supor[®] EAV Membrane

Description

Supor EAV filters incorporate a new hydrophilic and asymmetric machV technology polyethersulfone membrane for superior dirt load capacity for even the finest particles combined with a broad pH compatibility.

They also offer extended service life with the most complex biologic fluids, as well as very short processing times in the case of high-volume buffers, cell culture media and supernatants.

In biotechnology, blood product, vaccine and buffer applications, these membrane benefits mean higher yield, higher process safety, less total filtration time, less filters to change and less cost.

Key Features

- Reliable bioburden control of chemical or biological fluids
- Low hold up volume
- Integrity testable
- Disposable format to avoid cleaning and cleaning validation
- Available presterilized by Gamma irradiation or sterilizable by autoclaving or gamma irradiation
- Validated with *Brevundimonas diminuta* (ATCC 19146) to provide a typical titer reduction of $> 10^6$



Quality and Bio-Safety (P-grades)

Supor EAV high flow, long life filters have been specially designed and qualified for use in applications with buffers, as well as biologic and biotech fluids. The "P" Certificate meets and confirms pharmaceutical requirements on the effluent regarding:

- Cleanliness per USP Particulates in injectables per 21 CFR
- Non-Pyrogenic per USP Bacterial Endotoxins (< 0.25 EU/mL)
- Meets total organic carbon (TOC) and conductivity per USP Purified Water, pH per USP Sterile Purified Water
- Meets pH-shift per USP Sterile Purified Water

Biological Tests

- Meets USP biological reactivity, *in vivo*, for Class VI 121 °C plastics

The quality management system for manufacturing of EAV filter cartridges occurs in a controlled environment and in conformance with Certified Quality System ISO 9001.

Each filter is 100% integrity tested and fully traceable by individual marked lot and serial number.

* Per lot sample soak or rinse-up flush aliquot

Materials of Construction

Membrane	Hydrophilic polyethersulfone
Support and Drainage Layers	Polypropylene
End Cap, Core and Cage	Polypropylene
Outer Shell	Polypropylene

Physical Dimensions

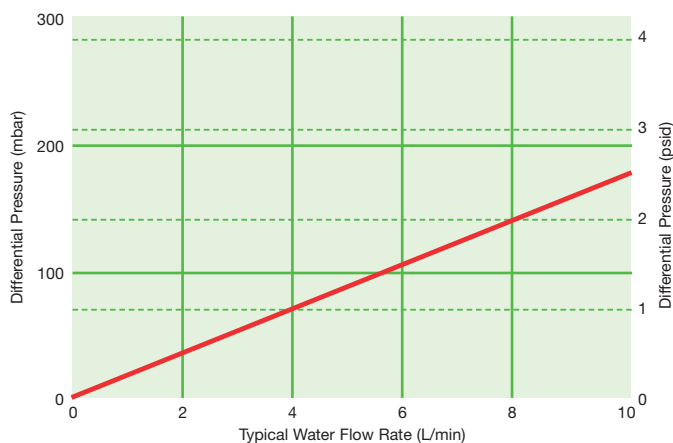
Diameter incl. Valves	109 mm (4.2 in.)
Total Length (Code 1)	174 mm (6.8 in.)
Total Length (Code 6)	210 mm (8.3 in.)
Total Length (Code 16)	192 mm (7.5 in.)
Effective Surface Area	0.21 m ² (1.6 ft ²)

Operating Parameters¹

Maximum Temperature	40 °C (104 °F)
Maximum Operating Pressure	5.2 bar (75 psi)
Maximum Differential Pressure	4.1 bar (59 psi)

¹ In compatible fluids which do not soften, swell or adversely affect the filter or its materials of construction.

Liquid Flow vs. Differential Pressure



Warning: Pre-sterilized **Kleenpak** assemblies should not be re-sterilized. **Kleenpak** assemblies must not be sterilized in-situ by passing steam under pressure. Do not autoclave after use if heat labile chemical contaminants are present on the filter.

Filters must be wetted prior to autoclave sterilization.

Sterilization²

Autoclave	10 cycles x 60 minutes at 125 °C (257 °F), slow exhaust
Gamma Irradiation	Maximum dose: 50 kGy

² For Code G version only. Membrane has to be wet for autoclave sterilization. Please refer to service instructions or contact Pall for more details.

Typical Extractables in water at 20 °C (68 °F)

< 10 mg per capsule

Ordering Information³

Part Number: KA EAVP

Code	Code	Inlet/Outlet Connections	Code	Sterilization Grade
3	1	1½ in. 'Tri-Clover' compatible	G	Non-sterilized version
	6	13 mm (½ in.) Single hose barb	S	Pre-sterilized version
	16	1½ in. 'Tri-Clover' compatible inlet and (½ in.) single hose barb outlet		

³ This is a guide to the part number structure only. For availability of specific options, please contact Pall or your local Pall distributor.

1 bar = 10⁵ Pa or 100 kPa



Life Sciences

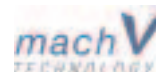
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