Supor™ EAV

MEMBRANE IN MINI KLEENPAK™ CAPSULES

Supor™ EAV filters incorporate a hydrophilic and asymmetric polyethersulfone (PES) membrane to combine superior dirt load capacity for even the finest particles with a broad pH compatibility.

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.

Supor EAV membrane in Mini Kleenpak™ capsules are high capacity, high flow rate filters ideal for filter-sizing studies or the processing of small volumes of pharmaceutical GMP process streams.

Fig 1. Supor EAV membrane in Mini Kleenpak capsules.

The benefits of Mini Kleenpak capsules with Supor EAV membrane include:

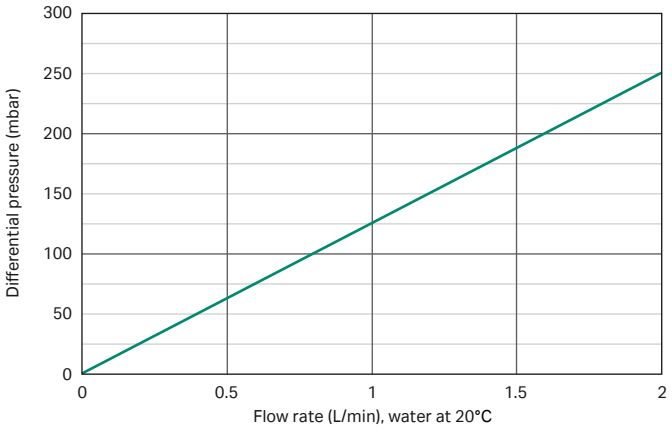
- **Superior value:** an asymmetric, high capacity PES membrane ensures maximum flow and throughput performance for smaller, more cost-effective filtration systems.
- **Economical scale-up:** for large production volumes, scale up from Mini Kleenpak capsules to high-area AB-style cartridges and Kleenpak Nova capsule filters.
- **Safety:** validated for the retention of *Brevundimonas diminuta* (ATCC 19146) with a typical titer reduction of 1×10^6 (6 LRV), they assure safety in applications where an absolute sterility claim is not essential.

Applications:

- Bioburden control of chromatography and ultrafiltration buffers.
- Prefiltration and/or bioburden control of biological or protein solutions.
- Bioburden reduction prior to sterilizing filtration on aseptic filling lines.

Specifications

Typical liquid flow vs differential pressure



For liquids other than water, multiply differential pressure by fluid viscosity (cP).

Fig 2. Typical liquid flow rate vs differential pressure in water at 20°C.

Operating parameters [1]

Maximum operating temperature	40°C
Maximum operating pressure	4.1 bar (60 psi) at 38°C

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

Materials of construction

Filter membrane	Hydrophilic asymmetric PES
Support/drainage	Non-woven polypropylene (PP)
Capsule shell	PP
Core and endcaps	PP
Filling bell	Polycarbonate
Sealing technology	Thermal bonding without adhesives

Sterilization [2]

Autoclave 'G' option	3 × 30 minutes at 135°C
Gamma irradiation 'G' option	Maximum of 50 kGy

[2] Pre-sterilized Mini Kleenpak capsules must not be re-sterilized.
Mini Kleenpak capsules must not be sterilized *in-situ* by passing steam under pressure.

Typical extractables in water at 20°C

< 2 mg per filter capsule

Nominal dimensions

Maximum diameter including valves	53 mm (2.1 in.)
Length - ¼ to ½ in. (6 to 13 mm) stepped hose barb inlet and outlet	105 mm (4.1 in.)
Length - ½ to ¾ in. (13 to 19 mm) sanitary flange inlet and outlet	73 mm (2.9 in.)

Nominal effective filter area (EFA)

260 cm^2

Removal rating [3]

Nominal rating	0.2 µm
Titer reduction of *B. diminuta*	1×10^6

[3] Validated titer reduction of *B. diminuta* at 10^6 TR (6 LRV), correlated to an integrity test value. Please contact Cytiva for further information.

Ordering information [4]

Connection	Sterilization option	Product code
¼ to ½ in. (6 to 13 mm) stepped hose barb	Non-sterilized, gamma irradiatable/autoclavable	KA02EAVP2G
	Pre-sterilized using gamma irradiation	KA02EAVP2S [5]
½ to ¾ in. (13 to 19 mm) sanitary flange	Non-sterilized, gamma irradiatable/autoclavable	KA02EAVP8G
	Pre-sterilized using gamma irradiation	KA02EAVP8S

[4] Three filters per box.
[5] Provided with filling bell on outlet. It is removable for in-line use.

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For local office contact information, visit cytiva.com/contact

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