



Supor[®] Sterilizing-Grade Cartridge Filter

Description

Supor polyethersulfone membrane cartridges are validated, 0.2 µm sterilizing grade filters with a unique combination of Pall Ultipleat[®] filter construction and built-in prefiltration to give longer filter life and lower filtration costs. The filters are suitable for sterile filtration of a wide range of fluids including buffers, biological fluids, tissue culture media, ophthalmic products and many others. The low protein and preservative binding of the **Supor** polyethersulfone membranes also ensures maximum transmission of active ingredients.

Key Features

- Hydrophilic polyethersulfone membrane for low adsorption and wide chemical compatibility
- Patented **Ultipleat** filter construction for high area and good flow rates
- Built-in prefilter layer for long life and low filtration costs
- High strength construction tolerates up to 1bar (14.5psi) differential pressure during steam-in-place sterilization
- Low hold up volumes
- High strength design allows for multiple autoclave cycles and extended use

High Quality Standards

Validated with *Brevundimonas diminuta* (ATCC 19146) at 10⁷/cm². Every production batch is routinely sampled for bacterial challenge.



Every filter is:

- Integrity tested during manufacture and results are continually validated against bacterial challenge
- Identified by a lot number and a unique serial number for complete traceability of manufacturing history and for user's traceability system
- Supplied with a Certificate of Test confirming the quality standards and quality control tests performed by Pall
- Manufactured under a Quality Management System certified to ISO 9000

Meets USP Biological Reactivity Tests, in-vivo, in accordance with USP Class VI 121°C and all materials listed in Drug Master File submitted to the FDA.

Supor filters meet the following standards:

- Cleanliness per USP Particulates in injectables*
- Non-Fiber-Releasing per 21 CFR*
- Non-Pyrogenic per USP Bacterial Endotoxins (0.25 EU/ml)*
- USP limits for TOC and conductivity under Purified Water after flushing*

*Per lot sample soak or rinse-up flush aliquots

A comprehensive validation guide is available for inclusion into user's validation documentation.

Materials of Construction

Membranes	Serial layer Polyethersulfone (PES)
Support/Drainage	Polypropylene
Core/cage endcaps	Polypropylene
Internal adapter support ring	Stainless steel
O-rings	Silicone elastomer
Sealing Technology	Thermal bonding without adhesives

Operating Parameters¹

Maximum Operating Pressure (Forward Direction)	5.5 bar (80 psi) @ 50°C (120°F) 3.0 bar (43 psi) @ 80°C (176°F)
Maximum Operating Pressure (Reverse Direction)	2.0 bar (30 psi) @ 50°C (120°F)

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

Sterilization²

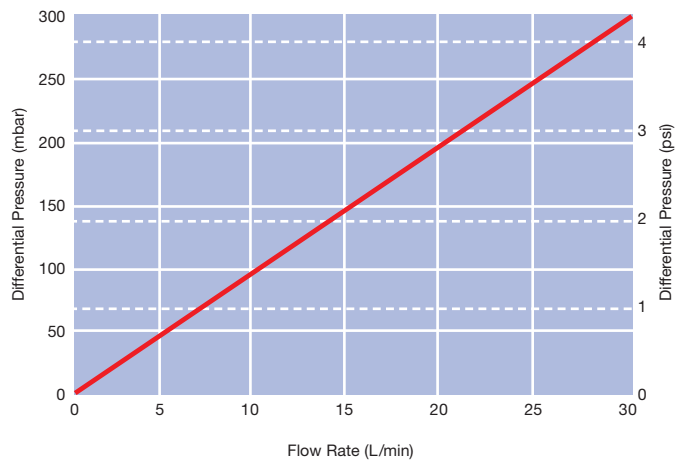
Autoclave	5 x 60 minutes cycles at 125°C (257°F)
In Situ Steam	5 x 30 minutes cycles at 142°C (287°F)

²Maximum differential pressure during steam sterilization is 1 bar (14.5 psi)

Physical Dimensions (nominal)

Lengths	254mm (10"), 508mm (20"), 762mm (30"), 1016mm (40")
Diameter	70mm (2.75")

Typical Liquid Flow Rates³



³For fluids at 1 cP viscosity. For other viscosities, divide flow rate by viscosity in cP.

Effective Filtration Area Per 254mm (10 inch) module

0.66m² (7.1ft²)

Typical Extractables* (Per 254mm module)

< 25mg in water at 20°C (68°F) after 4 hours extraction

*Tested on elements without pre-flushing

Integrity test values:

Values for 254 mm (10 inch) filter at 20°C (68°F)

Max. allowable Forward Flow (air test gas): Water wet ≤23 ml/min at 2760 mbar (40 psi)

Contact Pall for multi-element integrity test values and recommended test procedures

Order Information

Pall Part Number: AB

Code	Nominal Length
1	254mm (10 inch)
2	508mm (20 inch)
3	762mm (30 inch)
4	1016mm (40 inch)

EBV

Removal Rating
0.2µm sterilizing grade

7

Cartridge Style
Pall code 7 double O-ring bayonet lock and fin

P

Pharmaceutical Grade

H4

O-ring material
Silicone elastomer (Other material available on request)

Specifications and Availability: The information provided is a guide to the part number structure and possible options. Product availability may be subject to change without notice. All specifications are nominal. The literature was reviewed for accuracy at the time of publication. For additional information, consult your local Pall distributor.



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