FBDSSBKEN

Supor® Beverage Filter Cartridges
For Final Filtration

Supor Beverage filter cartridges are hydrophilic membrane filters designed for reliable retention of spoilage microorganisms in the final filtration of a range of beverages including wine and water.

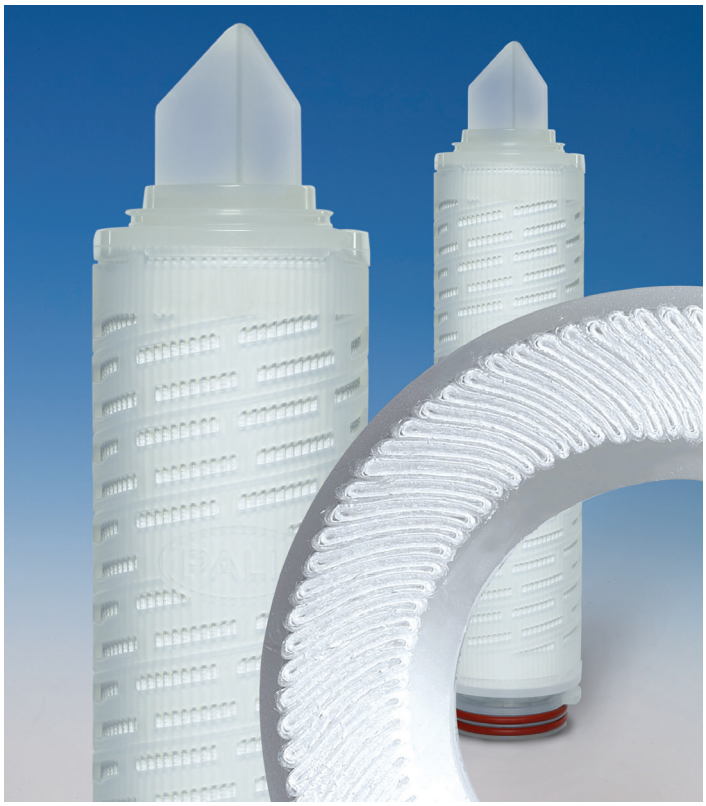
Description

The Supor Beverage filters were developed and validated for removal of common spoilage microorganisms. The Supor Beverage filters are 0.65 micron membrane filters developed and validated for removal of common spoilage mircoorganisms.

The cartridges are constructed from one layer of polyethersulfone (PES) membrane in a laid-over pleat configuration. The single open ended (SOE) configuration is designed to fit into sanitary housings to ensure effective microbial reduction and assembly integrity.

Supor Beverage filter cartridges are suitable for exposure to repeated hot water sanitization and in situ steam sterilization cycles for longer service life. The laid-over pleat configuration combined with optimized support and drainage materials, provide increased mechanical strength during operation, repeated hot water, chemical and steam sanitization and thus, high throughput.

Features	Benefits
Inert polyethersulfone (PES) media	· Maintaining organoleptic characteristics of the filtered product · Minimal interaction with valuable colloids · Wide range of chemical compatibility
Cartridges resistant to numerous sanitization cycles	· Economical operation · Consistent filtrate quality
Hydrophilic membrane	· Easy to wet and integrity test
Validated with wine spoilage microorganisms	· Increased process safety · Microbial stabilization of wine
Individually serialized cartridges	· Full traceability
Integrity testable	· Brand protection · Documentation for quality records
Multiple adaptor options	· Easy installation into sanitary housings



Supor Beverage Filter Cartridges

Quality

· Cartridges produced in a controlled environment
· Manufactured according to ISO 9001:2015 certified Quality Management System

Food Contact Compliance

Please refer to the Pall website http://www.pall.com/foodandbev for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.

Microbial Removal Rating

Test Organism	Log Reduction Value (LRV) for BK Grade
Escherichia coli (ATCC 25922)	>10
Saccharomyces cerevisiae	Yeast free*
Dekkera bruxellensis (ATCC 64276)	Yeast free*

Challenges were performed at a level of $\geq 10^7$ per cm^2 of effective filtration area on new and unused filters.

*Filters provided a yeast free effluent when challenged.

Materials of Construction

Filter medium*	Polyethersulfone (hydrophilic)
Support and drainage	Polypropylene
Core, Cage, End Cap and Fin End	Polypropylene
Adaptor	Polypropylene with internal stainless steel reinforcing ring
O-ring seal	Ethylene propylene rubber or Silicone elastomer

*Each 10" module contains 0.75 m^2 (8.0 ft^2) of effective filtration area for BK grade.

Technical Information

Operating Characteristics in Compatible Fluids[1]

Maximum Differential Pressure	Operating Temperature
5.5 bard (79.8 psid) (forward pressure)	25 °C (77 °F)
4.0 bard (58.0 psid) (forward pressure)	80 °C (176 °F)
1.0 bard (14.5 psid) (reverse pressure)	40 °C (104 °F)
300 mbard (4.4 psid) (forward pressure)	during *in-situ* steam sterilization

[1] Compatible fluids are defined as those which do not swell, soften or attach any of the filter components

Chemical Cleaning (static soak conditions)

Media	Temperature	Cumulative Exposure[3]
		BK Grade
Caustic 2%	50 °C (122 °F)	400 hours
Caustic 2%	80 °C (176 °F)	200 hours

[3] Measured under laboratory test conditions. The actual cumulative time depends on the process conditions.

Sterilization and Sanitization

Media	Temperature	Cumulative Exposure Time/cycles[2]
		BK Grade
Steam	125 °C (257 °F)	125 x 20 min cycles
Hot water	90 °C (194 °F)	200 x 30 min cycles
Peracetic acid (PAA), 325 ppm PAA (1275 ppm H_2O_2 to give 1600 ppm of total peroxides)	ambient	2000 hours
Potassium metabisulphite (1000 ppm)	ambient	1000 hours

[2] Measured under laboratory test conditions. The actual cumulative time depends on the process conditions. For applications requiring sterilization or sanitization Pall recommends the use of Code 7 adaptors to ensure filter sealing after cooling. Cartridges should be cooled to system operating temperature prior to use. Contact Pall for recommended procedures.

Pressure Drop vs Liquid Flow Rate[4]

Code	Value
BK	42.5 liters per minute @ 100 mbar (7.6 US gpm @ 1 psi)

[4] Typical initial clean media differential pressure (dP) per 254 mm (10") cartridge for water at 20 °C (68 °F); viscosity 1 centipoise. For 508, 762 mm and 1016 mm configurations divide the differential pressure by 2, 3, and 4 respectively.

Ordering Information

Cartridge Part Number

AB ☐ **SBK** ☐ **W** ☐

Table 1 Table 2 Table 3

This is a guide to the Part Numbering structure only. For specific options, please contact Pall.

Table 1: Nominal Length

Code	Description
1	254 mm (10”)
2	508 mm (20”)
3	762 mm (30”)
4	1016 mm (40”)

Table 2: Adaptor

Code	Description
3	SOE – single open end with flat closed end and external 222 O-rings
7	SOE – single open end with fin end, 2 locking tabs and external 226 O-rings
8	SOE – single open end with fin end and external 222 O-rings
28	SOE – single open end with fin end, 3 locking tabs and external 222 O-rings

Table 3: O-Ring Seal Material

Code	Description
H4	Silicone Elastomer
J	Ethylene Propylene Rubber

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Visit us on the Web at www.pall.com/foodandbev

Pall Corporation has offices and plants throughout the world. To locate the Pall office or distributor nearest you, visit www.pall.com/contact.

The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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