

Sartocool® PS

Membrane Filter Cartridge for Food & Beverage Applications Only



Product Information

Sartocool® PS filter cartridges feature a high-performance, pleated PES membrane. The ideal choice for the filtration in the food and beverage industry, especially developed for the filtration of beer and sparkling wine.

- High filtration performance
- Excellent throughputs
- Chemical et Mechanical Stability
- Microbial stability

Applications

The Sartocool® PS filter cartridge has been specially designed for the sterile filtration of food liquids. We have focused on ensuring microbiological stability with low operating costs to meet the requirements of the food industry. Sartocool® PS cartridges are used for final filtration before bottling for drinks such as:

- Wine
- Sparkling wine
- Bottled water
- Beer

Product Performance

Filterability of beer is the decisive factor determining the throughput of the cartridges. Nevertheless, the optimized membrane geometry of Sartocool® PS minimizes the build-up of β-glucans, and thus gelation, ensuring excellent throughput. Up to now, cleaning processes using conventional caustic soda, which is available in every brewery, achieved outstanding results. The high throughput of Sartocool® PS filter cartridges, when used under optimum conditions, will result in filtration costs that are equal to those of flash pasteurization.

Stability

Sartocool® PS filter cartridges withstand multiple steam sterilisation cycles up to 135 °C without loss of filter integrity.

Integrity Test

In order to ensure filter reliability, Sartocool® PS filter cartridges can be checked before and after every use with an integrity test.

Quality Control

Each individual element is tested for integrity during production by Bubble-Point and Diffusion-Test assuring highest product quality.

Documentation

Sartocool® PS membrane filters are designed and manufactured according to an ISO 9001 certified quality management system.

Technical Data

Specifications

Materials	
Membrane	Asymmetric, double layer, Polyethersulfone
Support Fleece	Polypropylene
Outer Cage, Inner Core, End Caps, Adapter	Polypropylene
O-Rings	Silicone

Retention rate	
0.45 µm	
0.65 µm	

Available Sizes | Filtration Area

Height and Filtration Area 0.45 µm		
Size 1	10"	0.6 m ² 6.5 ft ²
Size 2	20"	1.2 m ² 13 ft ²
Size 3	30"	1.8 m ² 19.5 ft ²
Size 4	40"	2.4 m ² 26 ft ²

Height and Filtration Area 0.65 µm		
Size 1	10"	0.58 m ² 6.2 ft ²
Size 2	20"	1.16 m ² 14.4 ft ²
Size 3	30"	1.74 m ² 18.6 ft ²
Size 4	40"	2.32 m ² 24.8 ft ²

Available Adapters

25, 27, 28

Operating Parameters		
Max. Allowable Differential Pressure	Sartocool® PS 0.45 µm	Sartocool® PS 0.65 µm
Temperature [°C]	25 80	25 80
Pressure [bar]	6.9 2.4	5.5 1.0
Pressure [psi]	100 35	80 15
Max. Allowable Back Pressure	Sartocool® PS 0.45 µm	Sartocool® PS 0.65 µm
Temperature [°C]	25 80	25
Pressure [bar]	3.0 1.0	2.1
Pressure [psi]	44 15	30
Sterilisation	Sartocool® PS 0.45 µm	Sartocool® PS 0.65 µm
	<ul style="list-style-type: none"> ▪ Autoclave at 130 °C, 30 minutes, min. ▪ Steam at 135 °C, 30 minutes, ΔP max. 0.3 bar 4psi, min. 50 cycles 	<ul style="list-style-type: none"> ▪ Autoclave at 130 °C, 30 minutes, min. ▪ Steam at 135 °C, 30 minutes, ΔP max. 0.3 bar 4psi, min. 50 cycles
Sanitization	Sartocool® PS 0.45 µm	
	<ul style="list-style-type: none"> ▪ Hot water at 85 °C, 30 minutes, min. 50 cycles 	

Compatibility

Sartocool® PS meet the requirement of the current USP <88> for plastics Class VI (121 °C).

All materials of construction used to produce these filter products are selected in compliance with the EU and US requirements for products intended to come in contact with foodstuff:

- Meet the requirements for European Food Contact Materials Regulation as detailed in (EC) No 1935/2004 and (EU) No 10/2011.

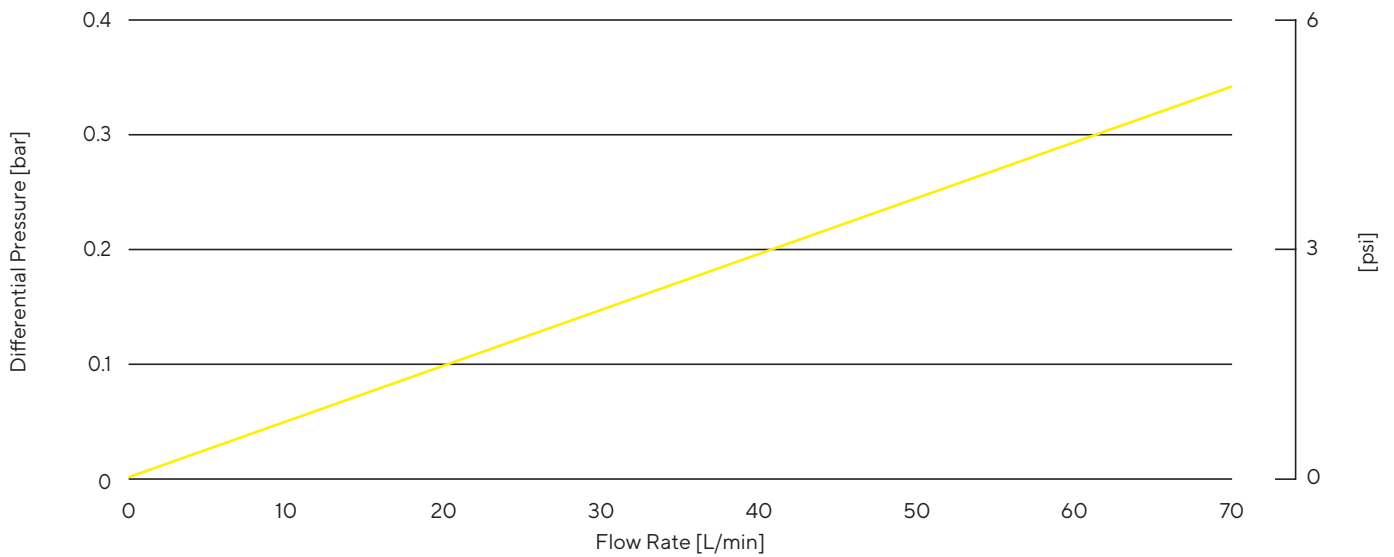
- Meet the United States Food and Drug Administration (US FDA) requirements as detailed in Code of Federal Regulations (CFR), Title 21, paragraphs 170 – 189. The FDA Compliance for indirect food additives is based on the information provided by our raw material suppliers.

All used materials meet FDA requirements.

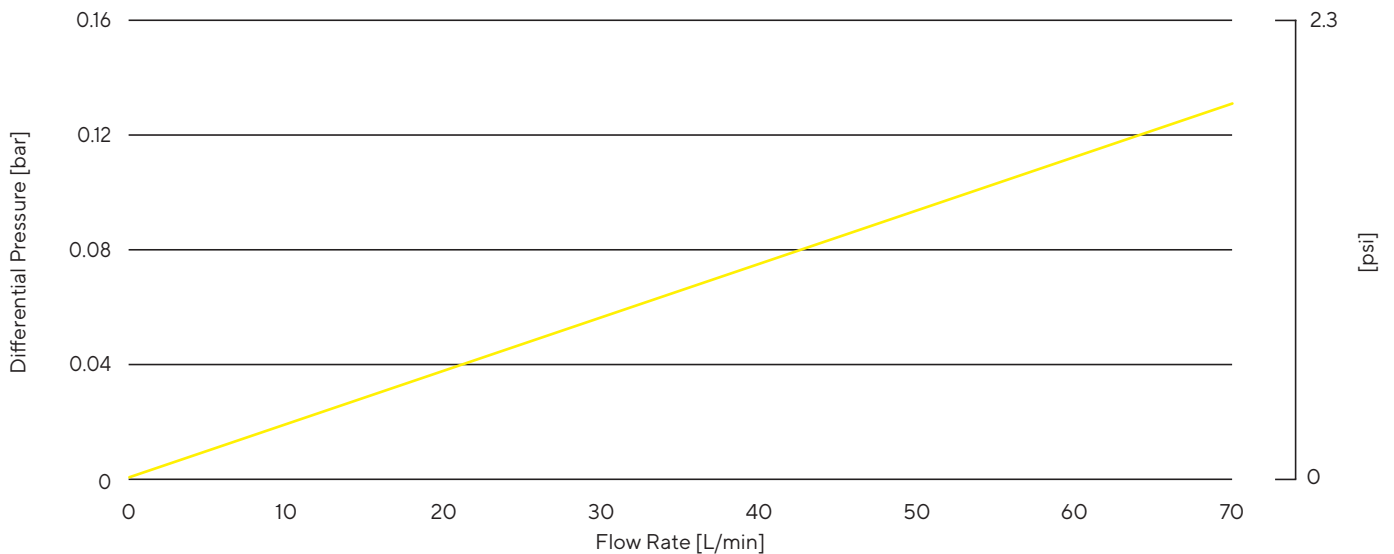
Sartocool® PS filter cartridges are free of pork DNA and drinkable alcohol.

Sartocool® PS Water Flow Rates (l/min) for Cartridges at 20 °C

Water flow rate for Sartocool® 0.45 µm 10" cartridge filters



Water flow rate for Sartocool® 0.65 µm 10" cartridge filters



Ordering Information

Integrity Test Data for Sartocool® PS Filter Cartridges

Order Code	Retention rate [μm]	Pack Size [Pieces]	Test Pressure [bar psi]	Max. Diffusion [mL/min]	Min. Bubble Point [bar psi]
530C**06A1	0.45	1	1.2 17	15	1.5 22
530C**06A2	0.45	1	1.2 17	30	1.5 22
530C**06A3*	0.45	1	1.2 17	45	1.5 22
530C**06A4*	0.45	1	1.2 17	60	1.5 22
530C**05A1	0.65	1	0.6 8.7	15	0.8 11.6
530C**05A2	0.65	1	0.6 8.7	30	0.8 11.6
530C**05A3*	0.65	1	0.6 8.7	45	0.8 11.6
530C**05A4	0.65	1	0.6 8.7	60	0.8 11.6

Test Limits for max. Pressure Drop depend on the installation and need to be determined individually.

* Partially available as G-pack (box of 25)


** Adapter 25, 27, 28

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