

# Sartobran P 0.1 µm

## Sterilizing Grade Filter Cartridges



### Description

Sartobran P 0.1 µm rated, high-flow filter elements are designed to give enhanced sterility assurance for applications with microorganisms present that can pass through 0.2 µm rated sterilizing grade filters. The Sartobran P's cellulose acetate membrane offers ultra low binding properties for proteins and preservatives, making Sartobran P filters the ideal choice for filtration of high value bio-pharmaceutical products.

### Applications

All applications which require sterilizing grade filtration with retention finer than conventional 0.2 µm sterilizing grade filters for removal of unusually small microorganisms. This typically includes:

- Bio-processed pharmaceuticals
- Long term filling operations
- Filtration in pharmaceutical water systems

Any other application requiring sub 0.2 µm filtration for enhanced sterility assurance.

### Flow Rates

Higher flow rates than other 0.1 µm rated filters provide short filtration time and gentle product treatment, even if replacement of conventional 0.2 µm rated filters is necessary.

### Total Throughput

Due to the "built-in prefiltration" by a 0.45 µm membrane, Sartobran P 0.1 µm filters provide higher total throughputs than any other 0.1 µm rated filter for economical process design.

### Highest Product Yield

The ultra low adsorption characteristic of the Sartobran P's cellulose acetate membrane provides the highest product yield - especially important for high value proteins.

### Flexibility

Sartobran P 0.1 µm filters are available in traditional cartridge formats and disposable capsules from 150 cm<sup>2</sup> to 1.8 m<sup>2</sup> for simple linear scale up and process flexibility.

### Quality Control

Each individual element is integrity tested by diffusion and bubble point test prior to release, assuring absolute reliability.

### Documentation

Sartobran P cartridges are designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System. A Validation Guide and Extractables Guide are available for compliance with regulatory requirements.

### Specifications

#### Materials

Prefilter Membrane:	Cellulose Acetate
Endfilter Membrane:	Cellulose Acetate
Support Fleece:	Polypropylene
Core:	Polypropylene
End Caps:	Polypropylene
O-Rings:	Silicone (optional EPDM or Viton)

#### Pore Size

0.45 µm + 0.1 µm

#### Available Sizes | Filtration Area

#### Cartridges

Size 1	10"	0.6 m <sup>2</sup>   6 ft <sup>2</sup>
Size 2	20"	1.2 m <sup>2</sup>   12 ft <sup>2</sup>
Size 3	30"	1.8 m <sup>2</sup>   18 ft <sup>2</sup>

#### Capsules | Mini Cartridges

Size 7	0.05 m <sup>2</sup>   0.5 ft <sup>2</sup>
Size 8	0.1 m <sup>2</sup>   1 ft <sup>2</sup>
Size 9	0.2 m <sup>2</sup>   2 ft <sup>2</sup>

#### Available Adapters Cartridges

21, 25, 27, 28

#### Available Adapter Mini Cartridges

15

#### Available Connectors Capsules

SS, SO, OO

#### Operating Parameters

Max. Allowable Differential Pressure:	5 bar   75 psi at 20 °C (Cartridges)
	4 bar   58 psi at 20 °C (Capsules)
	2 bar   29 psi at 80 °C (Cartridges and Capsules)
Max. Allowable Back Pressure:	2 bar   29 psi at 20 °C

# Membrane Filter Cartridges

## Specifications

### Extractables

Sartobran P 0.1 µm rated filter cartridges meet, or exceed the requirements for WFI quality standards set by the current USP.

### Regulatory Compliance

100% Individually integrity tested

Integrity test correlated to HIMA/ASTM F 838-83 Bacteria Challenge Test.

Non-pyrogenic according to USP Bacterial Endotoxins

Passes USP Plastics Class VI Test

Non-fiber releasing according to 21 CFR

## Sterilization

### In-Line Steam Sterilization

134 °C, 20 min. at max differential pressure of 0.5 bar | 7 psi

### Note:

Capsules cannot be in-line steam sterilized.

### Autoclaving:

134 °C, 2 bar | 29 psi, 30 min

### Sterilization Cycles

In-Line Sterilization: Min. 25

(only cartridges)

Autoclaving: Min. 25

## Technical References

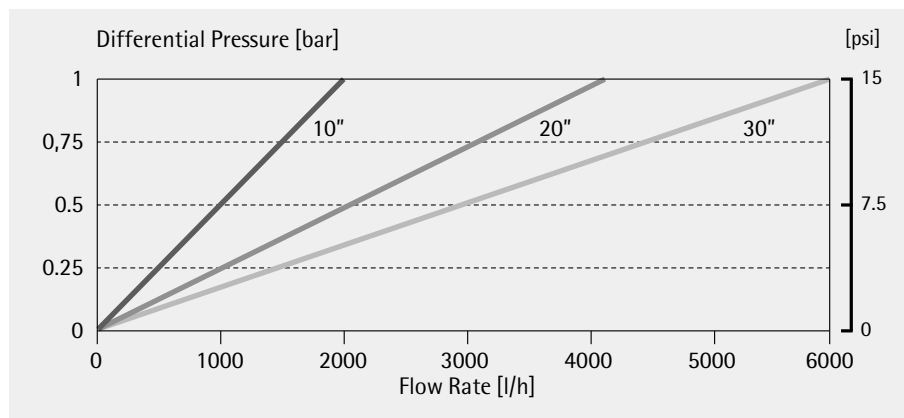
### Validation Guide:

SPK5726-e

### Extractables Guide:

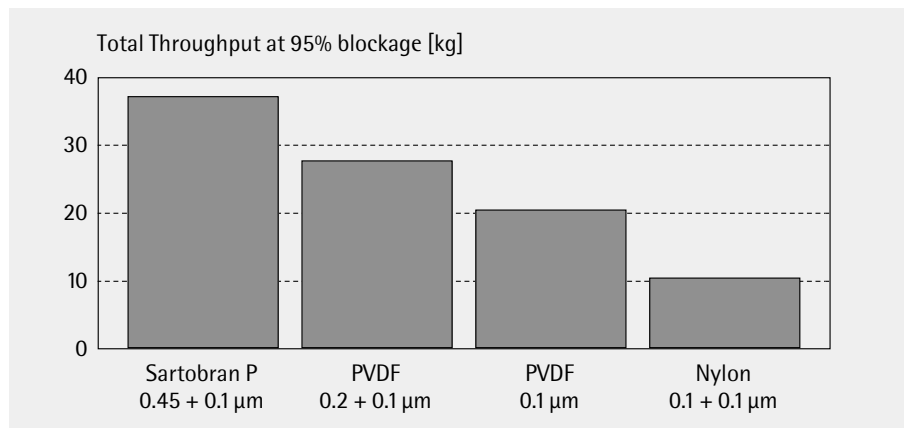
SPK5720-e

Water Flow Rates for 10", 20" and 30" Cartridges



Standardized at 20 °C

Total Throughput Comparison



10" Cartridge format

## Ordering Information

Order Code	Pore size [µm]
<b>Standard Cartridges</b>	
523**58H1----P	0.1
523**58H2----P	0.1
523**58H3----P	0.1
<b>Capsules</b>	
5231358H7--**--B	0.1
5231358H8--**--B	0.1
5231358H9--**--A	0.1
<b>Mini-Cartridges</b>	
5231558H7-----B	0.1
5231558H8-----B	0.1
5231558H9-----B	0.1

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