Sartobran P 0.2 µm
Sterilizing Grade Filter Cartridges and Mini Cartridges

Description
Sartobran P sterilizing grade filter cartridges have proven throughout the years to be the first choice in the bio-pharmaceutical industry for all applications requiring low adsorption capabilities. The unique ultra low unspecific binding capacity of the cellulose acetate membranes assures highest protein yield and rapid preservative recovery. Sartobran P filters are ideally suited for processing high value biological solutions like dilute protein solutions and pharmaceuticals sensitive to adsorption like dilute preservative solutions.

Applications
Sartobran P filters are ideally suited for all applications that require highest product recovery rates like:
- Coagulation Factors, Albumine, IgG
- Bacterial and Viral Vaccines
- MAB's
- Bio-processed Pharmaceuticals
- Diagnostics
- Purified Protein Solutions
- Biological Fluids
- Solutions containing Preservatives

Highest product yield
The Sartobran P's cellulose acetate membrane provides the lowest unspecific adsorption of any membrane material available, ensuring the highest product recovery rates.

Performance
Due to the "built-in prefiltration" by a 0.45 µm membrane, Sartobran P 0.2 µm filters provide excellent total throughputs and higher flow rates at low differential pressure for gentle product treatment.

Flexibility
Sartobran P 0.2 µm filters are available in traditional cartridge formats and disposable capsules from 150 cm² to 1.8 m² for simple linear scale up and process flexibility.

Microbiological retention
Sartobran P 0.2 µm rated filter cartridges are fully validated as sterilizing grade filter elements according to HIMA and ASTM F-838-83 guidelines.

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.

Water Flow Rates for Standard Cartridges and MaxiCaps

Total Throughput Comparison

- Adsorption per 10" cartridge [mg]
- BSA Adsorption
- IgG Adsorption

10" Cartridge format

Standardized at 20°C
Specifications

Pore size
0.45 µm + 0.2 µm

Available sizes | Filtration area

<table>
<thead>
<tr>
<th>Cartridges</th>
<th>Size</th>
<th>Filtration area</th>
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</thead>
<tbody>
<tr>
<td>Size 1</td>
<td>10”</td>
<td>0.6 m²</td>
</tr>
<tr>
<td>Size 2</td>
<td>20”</td>
<td>1.2 m²</td>
</tr>
<tr>
<td>Size 3</td>
<td>30”</td>
<td>1.8 m²</td>
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<table>
<thead>
<tr>
<th>Mini Cartridges</th>
<th>Size</th>
<th>Filtration area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size 7</td>
<td></td>
<td>0.05 m²</td>
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<tr>
<td>Size 8</td>
<td></td>
<td>0.1 m²</td>
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<tr>
<td>Size 9</td>
<td></td>
<td>0.2 m²</td>
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</table>

Available adapters cartridges
21, 25, 27, 28

Available adapter Mini Cartridges
15, 18

Extractables
Sartobran P 0.2 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 and MaxiCaps cannot be in-line steam sterilized.

Autoclaving
134°C, 2 bar | 29 psi, 30 min

Sterilization cycles

In-line sterilization Min. 25
Autoclaving Min. 25

Technical references
Validation Guide SPK5726-e
Extractables Guide SPK5720-e

Materials

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<thead>
<tr>
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<tbody>
<tr>
<td>Prefilter membrane</td>
<td>Cellulose Acetate</td>
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<tr>
<td>Endfilter membrane</td>
<td>Cellulose Acetate</td>
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<tr>
<td>Support fleece</td>
<td>Polypropylene</td>
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<tr>
<td>Core</td>
<td>Polypropylene</td>
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<tr>
<td>End caps</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>O-Rings</td>
<td>Silicone (optional EPDM or Viton)</td>
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Operating parameters

Max. allowable differential pressure
5 bar | 75 psi at 20°C
2 bar | 29 psi at 80°C

Max. allowable back pressure
2 bar | 29 psi at 20°C

Ordering information

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<thead>
<tr>
<th>Order code</th>
<th>Size</th>
<th>Pore size [µm]</th>
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<table>
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<th>Mini Cartridges</th>
<th>Size</th>
<th>Pore size [µm]</th>
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