



Sartopure® PP3

Particle Reduction Filter Elements

Product Information

- High performance polypropylene fleece prefilters for particle reduction
- Advanced fleece materials with retention ratings from 0.45 – 100 µm
- Broad chemical compatibility with low extractable profile



The Sartopure® PP3 prefilter platform is the result of decades of experience in prefiltration in pharmaceutical and biopharmaceutical processes. This development has led to a polypropylene fleece-based prefilter offering both, highest total throughput and protective abilities. Its outstanding filtration ability results in a significant reduction of the required filtration area, essentially reducing filter consumption and the overall cost of prefiltration. Sartopure® PP3 is the ideal choice for particle retention and protection of downstream equipment for all product contact applications.

Robust Processes

The Sartopure® PP3 series provides exceptional robustness to prefiltration applications based on the unique retention performance of its fleece material. The fleece retains particles with high efficiency even under varying process conditions, ensuring secure and reliable operation.

High Product Yield

The all-polypropylene design of Sartopure® PP3 provides low un-specific binding for highest product yield during your filtration processes.

High Flexibility

Sartopure® PP3 filter elements are available with a broad variety of retention ratings from 0.45 µm up to 100 µm making them ideally suited for numerous prefiltration applications.

Broad Compatibility and Low Extractables

Sartopure® PP3 filter elements consist entirely of polypropylene, which leads to broad chemical compatibility with a large number of solvents, acids and bases. Moreover the all-polypropylene design guarantees a small extractable profile.

Cost-Saving

The outstanding throughput performance and retention capability of Sartopure® PP3 enables downsizing of the required filtration area for pre- and final sterilizing grade filtration steps, resulting in significant cost savings.

Applications

- Protection of downstream equipment
- Clarification in vaccine production
- Ophthalmics
- Large volume parenterals
- Antibiotics & solvents
- Food & beverage

For food & beverage applications please refer to our dedicated F&B Sartopure® PP3 datasheet.

Technical Data

Available Sizes		Filtration Area [m ² ft ²]		
Cartridges T-Style MaxiCaps [®] MaxiCaps [®]	Retention Rate	0.45 µm	0.65 µm – 3 µm	5 µm – 100 µm
Size 1		0.4 4.3	0.45 4.8	0.65 7.0
Size 2		0.8 8.6	0.9 9.7	1.3 14
Size 3		1.2 12.9	1.35 14.5	1.95 21
Size 4**		1.6 17.2	on request	on request

MidiCaps [®] Mini Cartridges	Retention Rate	0.45 µm	0.65 µm – 3 µm	5 µm – 100 µm
Size 7		0.04 0.43	0.05 0.54	0.065 0.7
Size 8		0.08 0.86	0.09 0.97	0.12 1.3
Size 9		0.13 1.4	0.15 1.6	0.21 2.3
Size 0*		0.26 2.8	0.30 3.2	0.42 4.5

Capsules	Retention Rate	0.45 µm	0.65 µm – 1.2 µm	3 µm – 100 µm
Size 4		0.012 0.13	0.013 0.14	0.018 0.19
Size 5		0.024 0.26	0.026 0.28	0.036 0.39

*only for MidiCaps[®]

** only for Cartridges

Max. Allowable Differential Pressure

Cartridges | MidiCaps[®]

5 bar | 72.5 psi at 20°C

2 bar | 29 psi at 80°C

T-Style MaxiCaps[®] | MaxiCaps[®]

5 bar | 72.5 psi at 20°C

3 bar | 43.5 psi at 50°C

Capsules

4 bar | 58 psi at 20°C

2 bar | 29 psi at 80°C

Max. Allowable Back Pressure

2 bar | 29 psi at 20°C

(for all elements)

Max. Operating Pressure

Cartridges | T-Style MaxiCaps[®] | MaxiCaps[®] | MidiCaps[®] | Mini Cartridges

5 bar | 72.5 psi at 20°C

Capsules

4 bar | 58 psi at 20°C

Materials

Filter Membrane

Polypropylene fleece

End Caps

Polypropylene

Support Fleece

Polypropylene

Housing

Polypropylene

Core

Polypropylene

O-Rings

Silicone (optional: EPDM or Fluoroelastomer)

Available Retention Rates

0.45 µm, 0.65 µm, 1.2 µm, 3 µm, 5 µm, 8 µm, 20 µm, 50 µm, 100 µm

Technical References

Validation Guide

85037-544-50, SPK5805-e

Extractables Analysis

EA 0.45 85037-544-51, SPK5806-e

EA 0.65 –100 58037-544-52, SPK5807-e

Regulatory Compliance

- Designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System
- Meet or exceed the requirements for WFI quality standards set by the current USP
- Non-pyrogenic according to USP Bacterial Endotoxins
- Pass USP Plastic Class VI Test
- Non-fiber releasing according to 21 CFR

Sterilization

Cartridges

In-Line Steam Sterilization

134 °C, 20 min. at max differential pressure of 0.5 bar | 7.25 psi
Min. 25 Sterilization Cycles

or

Autoclaving

134°C, 2 bar, 30 min
Min. 25 Sterilization Cycles

T-Style MaxiCaps® | MaxiCaps® | MidiCaps® | Capsules

Autoclaving

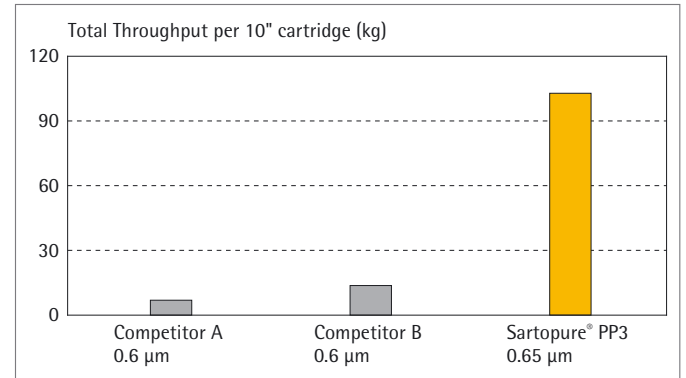
134°C, 2 bar, 30 min
Min. 25 Sterilization Cycles

Note: T-Style MaxiCaps®, MaxiCaps®, MidiCaps® and Capsules cannot be in-line steam sterilized

Performance

Standard Test Media 3-fold Concentrated

Total Throughput Comparison



Ordering Information



Cartridge

505 25 P

Retention Rate

06: 0.45 µm

05: 0.65 µm

03: 1.2 µm

02: 3 µm

42: 5 µm

01: 8 µm

20: 20 µm

50: 50 µm

98: 100 µm

Filter Size

1: 0.4 m² | 4.3 ft² (10")

2: 0.8 m² | 8.6 ft² (20")

3: 1.2 m² | 12.9 ft² (30")

1: 0.45 m² | 4.8 ft² (10")

2: 0.9 m² | 9.7 ft² (20")

3: 1.35 m² | 14.5 ft² (30")

1: 0.65 m² | 7 ft² (10")

2: 1.3 m² | 14 ft² (20")

3: 1.95 m² | 21 ft² (30")



T-Style MaxiCaps® | MaxiCaps®

505 P --

Filter Design

73: MaxiCaps®

83: T-Style MaxiCaps®

Retention Rate

06: 0.45 µm

05: 0.65 µm

03: 1.2 µm

02: 3 µm

42: 5 µm

01: 8 µm

20: 20 µm

50: 50 µm

98: 100 µm

Filter Size

1: 0.4 m² | 4.3 ft² (10")

2: 0.8 m² | 8.6 ft² (20")

3: 1.2 m² | 12.9 ft² (30")

1: 0.45 m² | 4.8 ft² (10")

2: 0.9 m² | 9.7 ft² (20")

3: 1.35 m² | 14.5 ft² (30")

1: 0.65 m² | 7 ft² (10")

2: 1.3 m² | 14 ft² (20")

3: 1.95 m² | 21 ft² (30")

Connector Inlet

S: 1½" Tri-Clamp 50 mm

O: ½" single stepped hose barb

Connector Outlet

S: 1½" Tri-Clamp 50 mm

O: ½" single stepped hose barb



MidiCaps®

Retention Rate	Filter Size	Connector Inlet	Connector Outlet	Packing Size
06: 0.45 µm	7: 0.04 m ² 0.43 ft ² 8: 0.08 m ² 0.86 ft ² 9: 0.13 m ² 1.4 ft ² 0: 0.26 m ² 1.8 ft ²	S: 1½" Tri-Clamp 50 mm O: ½" single stepped hose barb	S: 1½" Tri-Clamp 50 mm O: ½" single stepped hose barb	A: box of 4 (size 7,8,9) V: box of 2 (size 0)
05: 0.65 µm 03: 1.2 µm 02: 3 µm	7: 0.05 m ² 0.54 ft ² 8: 0.09 m ² 0.97 ft ² 9: 0.15 m ² 1.61 ft ² 0: 0.30 m ² 3.23 ft ²			
42: 5 µm 01: 8 µm 20: 20 µm 50: 50 µm 98: 100 µm	7: 0.65 m ² 0.7 ft ² 8: 0.12 m ² 1.3 ft ² 9: 0.21 m ² 2.26 ft ² 0: 0.42 m ² 4.52 ft ²			



Mini Cartridge

Retention Rate	Filter Size	Connector Inlet	Connector Outlet	Packing Size
05: 0.65 µm 03: 1.2 µm 02: 3 µm	7: 0.05 m ² 0.54 ft ² 8: 0.09 m ² 0.97 ft ² 9: 0.15 m ² 1.61 ft ²	S: 1½" Tri-Clamp 50 mm O: ½" single stepped hose barb	S: 1½" Tri-Clamp 50 mm O: ½" single stepped hose barb	A: box of 4 (size 7,8,9) V: box of 2 (size 0)
42: 5 µm 01: 8 µm 20: 20 µm 50: 50 µm 98: 100 µm	7: 0.65 m ² 0.7 ft ² 8: 0.12 m ² 1.3 ft ² 9: 0.21 m ² 2.26 ft ²			



Capsules

Retention Rate	Filter Size	Connector Inlet	Connector Outlet	Packing Size
06: 0.45 µm	4: 0.012 m ² 0.13 ft ² 5: 0.024 m ² 0.26 ft ²	O: ¼" multiple stepped hose barb	O: ¼" multiple stepped hose barb	B: box of 5
05: 0.65 µm 03: 1.2 µm	4: 0.013 m ² 0.14 ft ² 5: 0.026 m ² 0.28 ft ²			
02: 3 µm 42: 5 µm 01: 8 µm 20: 20 µm 50: 50 µm 98: 100 µm	4: 0.018 m ² 0.19 ft ² 5: 0.036 m ² 0.39 ft ²			

Check the availability of your desired configuration with your Sartorius sales representative or online at www.sartorius-stedim.com

Sartorius Stedim Biotech GmbH
August-Spindler-Strasse 11
37079 Goettingen, Germany
Phone +49.551.308.0
www.sartorius-stedim.com

USA Toll-Free +1.800.368.7178
Argentina +54.11.4721.0505
Brazil +55.11.4362.8900
Mexico +52.55.5562.1102
UK +44.1372.737159
France +33.442.845600
Italy +39.055.63.40.41

Spain +34.913.586.098
Russian Federation
+7.812.327.53.27
Republic of South Africa
+27.11.315.5444
Japan +81.3.4331.4300
China +86.21.6878.2300



www.sartorius-stedim.com