

# Sartopure® PP3

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 fully polypropylene fleece-based prefilter, offering exceptional total throughput, protective abilities and a low extractables profile. 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.

## Product Information

- High performance polypropylene fleece prefilters for particle reduction
- Advanced fleece materials with retention ratings from 0.45 – 50 µm
- Broad chemical compatibility with low extractable profile



## 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 unspecific 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 50 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
- Viral vectors (esp. Lentivirus)
- Ophtalmics
- 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 <sup>2</sup>   ft <sup>2</sup> ]		
Cartridges   T-Style Maxicaps®   Maxicaps®	Retention Rate	0.45 µm	0.65 µm – 3 µm	5 µm – 50 µm
Size 1		0.4   4.3	0.45   4.8	0.65   7.0
Size 2		0.8   8.6	0.90   9.7	1.30   14
Size 3		1.2   12.9	1.35   14.5	1.95   21

Midicaps®   Mini Cartridges	Retention Rate	0.45 µm	0.65 µm – 3 µm	5 µm – 50 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 – 3 µm	5 µm – 50 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®

## Max. Allowable Differential Pressure

### Cartridges | Mini Cartridges

5 bar | 72.5 psi at 20 °C

2 bar | 29 psi at 80 °C

### T-Style Maxicaps® | Maxicaps® | Midicaps®

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 50 °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

<b>Filter Membrane</b> Polypropylene fleece	<b>End Caps</b> Polypropylene
<b>Support Fleece</b> Polypropylene	<b>Housing</b> Polypropylene
<b>Core</b> Polypropylene	<b>O-Rings</b> Silicone (optional: EPDM or Fluoroelastomer)

# Retention Rates

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

# 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

# Technical References

Validation Guide	3221262
Extractables Analysis	2552579
	2544688

# Sterilization

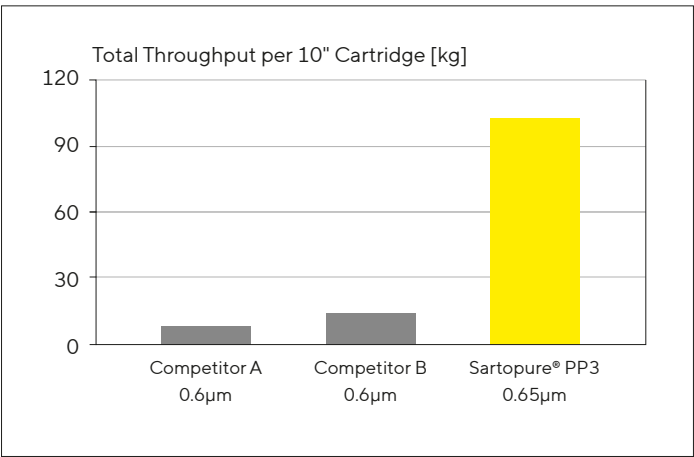
Autoclaving of wet filter cartridges, T-Style Maxicaps®, Midicaps® and Capsules up to a maximum temperature of 134 °C, for 30 minutes  
or  
In-line steam sterilization of wetted cartridges with a maximum of 2.3 bar | 34 psi inlet pressure and 2 bar | 29 psi outlet pressure (max. dp = 0.3 bar | 5 psi).

**Sartopure® PP3 Cartridges, Maxicaps®, T-Style Maxicaps®, Midicaps® and Mini Cartridges** can be autoclaved up to 25 times.

**Sartopure® PP3 Capsules** can be autoclaved up to 5 times.

# Performance

Total Throughput Comparison  
Standard test media 3-fold concentrated



# Ordering Information



## Cartridge

505 25 ■ P ■

### Retention Rate

06: 0.45  $\mu\text{m}$

05: 0.65  $\mu\text{m}$

03: 1.2  $\mu\text{m}$

02: 3  $\mu\text{m}$

42: 5  $\mu\text{m}$

01: 8  $\mu\text{m}$

20: 20  $\mu\text{m}$

50: 50  $\mu\text{m}$

### Filter Size

1: 0.4 m<sup>2</sup> | 4.3 ft<sup>2</sup> (10")

2: 0.8 m<sup>2</sup> | 8.6 ft<sup>2</sup> (20")

3: 1.2 m<sup>2</sup> | 12.9 ft<sup>2</sup> (30")

1: 0.45 m<sup>2</sup> | 4.8 ft<sup>2</sup> (10")

2: 0.90 m<sup>2</sup> | 9.7 ft<sup>2</sup> (20")

3: 1.35 m<sup>2</sup> | 14.5 ft<sup>2</sup> (30")

1: 0.65 m<sup>2</sup> | 7 ft<sup>2</sup> (10")

2: 1.30 m<sup>2</sup> | 14 ft<sup>2</sup> (20")

3: 1.95 m<sup>2</sup> | 21 ft<sup>2</sup> (30")



## Mini Cartridge

505 15 ■ P ■ -- - -- ■

### Retention Rate

05: 0.65  $\mu\text{m}$

03: 1.2  $\mu\text{m}$

02: 3  $\mu\text{m}$

42: 5  $\mu\text{m}$

01: 8  $\mu\text{m}$

20: 20  $\mu\text{m}$

50: 50  $\mu\text{m}$

### Filter Size

7: 0.05 m<sup>2</sup> | 0.54 ft<sup>2</sup>

8: 0.09 m<sup>2</sup> | 0.97 ft<sup>2</sup>

9: 0.15 m<sup>2</sup> | 1.61 ft<sup>2</sup>

7: 0.065 m<sup>2</sup> | 0.7 ft<sup>2</sup>

8: 0.12 m<sup>2</sup> | 1.3 ft<sup>2</sup>

9: 0.21 m<sup>2</sup> | 2.26 ft<sup>2</sup>

### Packing Size

B: box of 5



## T-Style Maxicaps® | Maxicaps®

505 ■ ■ P ■ -- ■ ■

### Filter Design

73: Maxicaps®

83: T-Style Maxicaps®

### Retention Rate

06: 0.45  $\mu\text{m}$

05: 0.65  $\mu\text{m}$

03: 1.2  $\mu\text{m}$

02: 3  $\mu\text{m}$

42: 5  $\mu\text{m}$

01: 8  $\mu\text{m}$

20: 20  $\mu\text{m}$

50: 50  $\mu\text{m}$

### Filter Size

1: 0.4 m<sup>2</sup> | 4.3 ft<sup>2</sup> (10")

2: 0.8 m<sup>2</sup> | 8.6 ft<sup>2</sup> (20")

3: 1.2 m<sup>2</sup> | 12.9 ft<sup>2</sup> (30")

1: 0.45 m<sup>2</sup> | 4.8 ft<sup>2</sup> (10")

2: 0.90 m<sup>2</sup> | 9.7 ft<sup>2</sup> (20")

3: 1.35 m<sup>2</sup> | 14.5 ft<sup>2</sup> (30")

1: 0.65 m<sup>2</sup> | 7 ft<sup>2</sup> (10")

2: 1.30 m<sup>2</sup> | 14 ft<sup>2</sup> (20")

3: 1.95 m<sup>2</sup> | 21 ft<sup>2</sup> (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®

505	53	■	P	■	--	■	■	--	■
<b>Retention Rate</b>		<b>Filter Size</b>		<b>Connector Inlet</b>		<b>Connector Outlet</b>		<b>Packing Size</b>	
06: 0.45 µm		7: 0.04 m <sup>2</sup>   0.43 ft <sup>2</sup>		S: 1½" Tri-Clamp 50 mm		S: 1½" Tri-Clamp 50 mm		A: box of 4 (size 7,8,9)	
		8: 0.08 m <sup>2</sup>   0.86 ft <sup>2</sup>		O: ½" single stepped		O: ½" single stepped		V: box of 2 (size 0)	
		9: 0.13 m <sup>2</sup>   1.4 ft <sup>2</sup>		hose barb		hose barb			
		0: 0.26 m <sup>2</sup>   1.8 ft <sup>2</sup>							
05: 0.65 µm		7: 0.05 m <sup>2</sup>   0.54 ft <sup>2</sup>							
03: 1.2 µm		8: 0.09 m <sup>2</sup>   0.97 ft <sup>2</sup>							
02: 3 µm		9: 0.15 m <sup>2</sup>   1.61 ft <sup>2</sup>							
		0: 0.30 m <sup>2</sup>   3.23 ft <sup>2</sup>							
42: 5 µm		7: 0.065 m <sup>2</sup>   0.7 ft <sup>2</sup>							
01: 8 µm		8: 0.12 m <sup>2</sup>   1.3 ft <sup>2</sup>							
20: 20 µm		9: 0.21 m <sup>2</sup>   2.26 ft <sup>2</sup>							
50: 50 µm		0: 0.42 m <sup>2</sup>   4.52 ft <sup>2</sup>							



## Capsules

505	13	■	P	■	--	■	■	--	B
<b>Retention Rate</b>		<b>Filter Size</b>		<b>Connector Inlet</b>		<b>Connector Outlet</b>		<b>Packing Size</b>	
06: 0.45 µm		4: 0.012 m <sup>2</sup>   0.13 ft <sup>2</sup>		O: ¼" multiple stepped		O: ¼" multiple stepped		B: box of 5	
		5: 0.024 m <sup>2</sup>   0.26 ft <sup>2</sup>		hose barb		hose barb			
05: 0.65 µm		4: 0.013 m <sup>2</sup>   0.14 ft <sup>2</sup>							
03: 1.2 µm		5: 0.026 m <sup>2</sup>   0.28 ft <sup>2</sup>							
02: 3 µm		4: 0.018 m <sup>2</sup>   0.19 ft <sup>2</sup>							
42: 5 µm		5: 0.036 m <sup>2</sup>   0.39 ft <sup>2</sup>							
01: 8 µm									
20: 20 µm									
50: 50 µm									



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