

# Sartoguard PES

Membrane Prefiltration MidiCaps®, MaxiCaps® and Capsules



## Description

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules are especially designed for effective bioburden control and reliable removal of particles from a broad range of fluid streams. They provide the finest, most efficient and reliable performance for critical prefiltration applications. They can be used for protection of Mycoplasma retentive or sterilizing grade filters. They allow downsizing of filtration systems and cost saving in applications where the use of validated sterilizing grade filters is not required, but reliable bioburden and turbidity reduction is.

## Applications

Typical applications of Sartoguard PES MidiCaps®, MaxiCaps® and Capsules include prefiltration of:

- Buffers
- Downstream Intermediates (before and after UF | DF and chromatography steps)
- Clarified cell culture harvest
- Cell Culture Media
- Aseptically filled Small Volume Parenterals (SVP)

## Economy

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules feature a unique heterogeneous double layer membrane construction in combination with an increased filtration area of 0.8 m<sup>2</sup>/10" cartridge. By providing outstanding total throughput and flow rate performance, they ensure highest process efficiency, minimized overall filtration costs and short filtration cycle times.

## Reliable Retention

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules are available with 0.1 µm and 0.2 µm nominal retention rating. The 0.1 µm rated filters typically provide a LRV of 6 per cm<sup>2</sup> filtration area for *Brevundimonas Diminuta*, while the 0.2 µm rated filters typically provide a LRV of 6 per cm<sup>2</sup> filtration area for *Serratia Marcescens*.

## Compatibility

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules elements are designed for broad chemical compatibility from pH 1 to pH 14 and low extractable levels. They are compatible with multiple autoclaving cycles for MidiCaps®, MaxiCaps® and Capsules.

## Quality & Security

Sartoguard PES filter are individually tested for integrity during production. The integrity of the filters can be verified onsite before and after use by a diffusion or bubble-point test.

## Scalability

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules elements are available in a broad range of sizes and formats to provide linear scale-up from R&D to process scale.

## Documentation

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules are designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System. A Validation Guide is available for compliance with regulatory requirements.

## Specifications

### Materials

Prefilter Membrane	PES, asymmetric
Endfilter Membrane	PES, asymmetric
Support fleece	Polypropylene
Core	Polypropylene
Capsule Housing	Polypropylene
End caps	Polypropylene
O-Rings	Silicone

### Pore Size Combinations

0.8 µm + 0.1 µm nominally  
1.2 µm + 0.2 µm nominally

### Available Sizes | Filtration Area

#### Capsule

Size 4 0.021 m<sup>2</sup> | 0.22 ft<sup>2</sup>

#### MidiCaps®

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

Size 8 0.13 m<sup>2</sup> | 1.4 ft<sup>2</sup>

Size 9 0.26 m<sup>2</sup> | 2.8 ft<sup>2</sup>

Size 0 0.52 m<sup>2</sup> | 5.6 ft<sup>2</sup>

#### MaxiCaps®

Size 1 0.8 m<sup>2</sup> | 8.6 ft<sup>2</sup>

Size 2 1.6 m<sup>2</sup> | 17.2 ft<sup>2</sup>

Size 3 2.4 m<sup>2</sup> | 25.8 ft<sup>2</sup>

### Available Connectors Capsules

SO, OO, SS

### Available Connectors MidiCaps®

SS, SO, OO, FF, FO, HH (only size 7)

### Available Connectors MaxiCaps®

SS, SO, OO, FF

S:	1½" Tri-Clamp (Sanitary)
O:	½" Single stepped hose barb
F:	¾" Tri-Clamp (Sanitary)
H:	¼" Multiple stepped hose barb (with filling bell at the outlet)

### Operating Parameters

Max. Allowable Differential Pressure:	5 bar   72.5 psi at 20°C (MidiCaps®)
	4 bar   58 psi at 20°C (MaxiCaps®   capsules)
	3 bar   43.5 psi at 50°C (MaxiCaps®)
	2 bar   29 psi at 80°C (MidiCaps®   capsules)
Max. Allowable Back Pressure:	2 bar   29 psi at 20°C

## По вопросам продаж и поддержки обращайтесь:

Астана+7(7172)727-132, Волгоград(844)278-03-48, Воронеж(473)204-51-73, Екатеринбург(343)384-55-89,  
Казань(843)206-01-48, Краснодар(861)203-40-90, Красноярск(391)204-63-61, Москва(495)268-04-70,  
Нижегород(831)429-08-12, Новосибирск(383)227-86-73, Ростов-на-Дону(863)308-18-15, Самара(846)206-03-16,  
Санкт-Петербург(812)309-46-40, Саратов(845)249-38-78, Уфа(347)229-48-12

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## Specifications

### Extractables

Sartoguard PES MidiCaps®, MaxiCaps® and Capsules meet, or exceed the requirements for WFI quality standards set by the current USP.

### Regulatory Compliance

Individually integrity tested during production

Onside integrity testable by diffusion or bubble-point test

Non pyrogenic according to USP Bacterial Endotoxins

Pass USP Plastic Class VI Test

Non fiber releasing according to 21 CFR

### Sterilization

Autoclaving:  
134°C, 2 bar, 30 min

### Sterilization Cycles

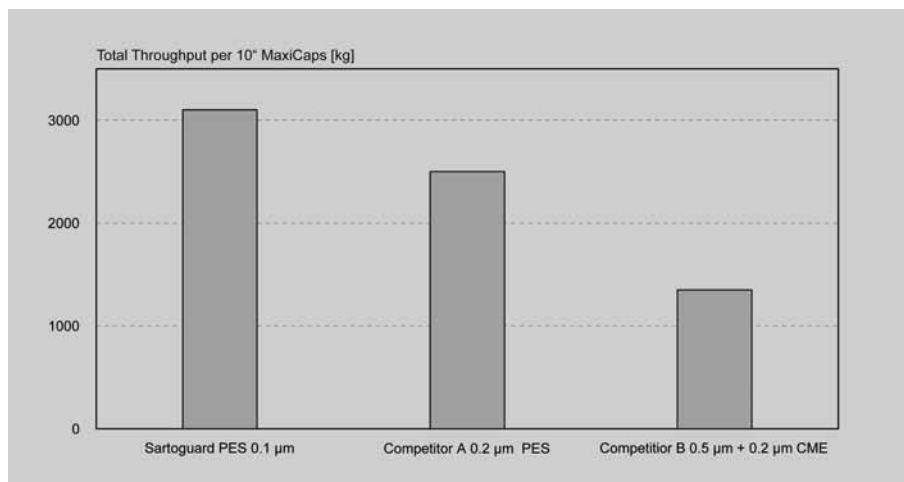
Autoclaving Min. 25 (MaxiCaps® & MidiCaps®)

### Technical References

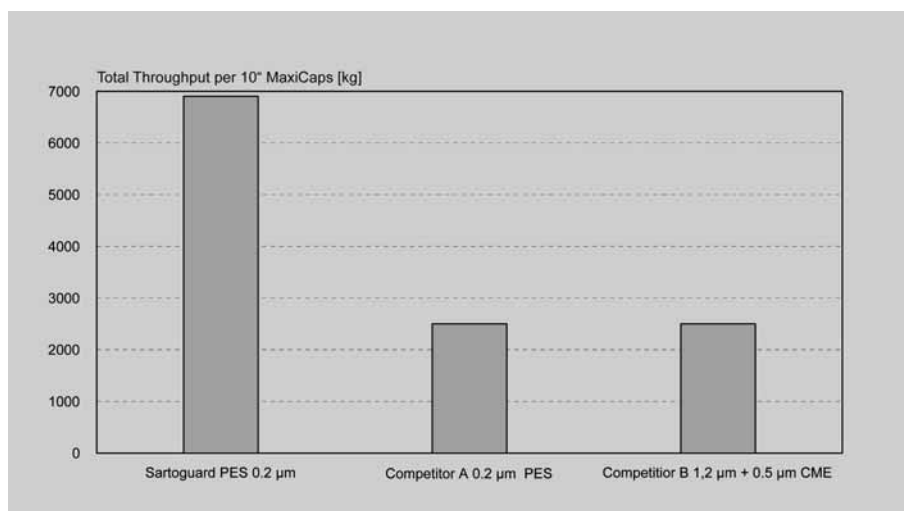
### Validation Guide:

SPK5782-e

## Soy Peptone Supplemented Cell Culture Media



## Soy Peptone Supplemented Cell Culture Media



### Order Information

Order Codes	Pore size Nominally [µm]	Pack Size [pieces]	Test pressure [bar   psi]	Max. Diffusion [ml/min]	Min. Bubble Point [bar   psi]
<b>MidiCaps® Capsule</b>					
5471358G4--**--B	0.1	5	1.5   22	1.1	2.8   40.5
5475358G7--**--A	0.1	4	1.5   22	3	2.8   40.5
5475358G8--**--A	0.1	4	1.5   22	6	2.8   40.5
5475358G9--**--A	0.1	4	1.5   22	9	2.8   40.5
5475358G0--**--V	0.1	2	1.5   22	18	2.8   40.5
<b>MaxiCaps®</b>					
5471358G1--**	0.1	1	1.5   22	25	2.8   40.5
5471358G2--**	0.1	1	1.5   22	50	2.8   40.5
5471358G3--**	0.1	1	1.5   22	75	2.8   40.5
<b>MidiCaps® Capsule</b>					
5471307F4--**--B	0.2	5	1.2   17.5	1.1	1.8   26
5475307F7--**--A	0.2	4	1.2   17.5	3	1.8   26
5475307F8--**--A	0.2	4	1.2   17.5	4	1.8   26
5475307F9--**--A	0.2	4	1.2   17.5	6	1.8   26
5475307F0--**--V	0.2	2	1.2   17.5	12	1.8   26
<b>MaxiCaps®</b>					
5471307F1--**	0.2	1	1.2   17.5	18	1.8   26
5471307F2--**	0.2	1	1.2   17.5	36	1.8   26
5471307F3--**	0.2	1	1.2   17.5	54	1.8   26

\*\* : Connector Styles

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