

# SteriPure-P Polyethersulfone Pleated Filter Cartridge



»» An Absolute Filter with Long Service Time and High Flow Rate



## Description

SteriPure-P cartridge filters have a built-in pre-filter membrane in front of the end-filter membrane. The unique anisotropic Polyethersulfone pre-filter membrane reduces the plugging rate of end-filter membrane effectively. The optimized SteriPure-P cartridge filters can provide longer service time than generic cartridge filters in most applications.

### »» Reliability

From raw materials purchase, transport to production and storage, all operations follow ISO 9001 quality management system. SteriPure-P manufactured, tested and packaged in a clean room to ensure product cleanliness. SteriPure-P cartridge filters are 100% integrity tested before they shipment. A validation guide for compliance with regulatory requirements is available.

### »» Compatibility

SteriPure-P cartridge filters are sealed using thermal bonding process, contain no adhesive and surfactant. The components of SteriPure-P, include of Polyethersulfone, Polypropylene and Silicone/EPDM, provide broad chemical compatibility from pH 1 to pH14 and low extractable levels at high temperature.

### »» Economy

SteriPure-P cartridge filters take use of the asymmetric, hydrophilic high porosity polyethersulfone membrane as pre-filter and end-filter. SteriPure-P cartridge filters are specifically designed to deal with broad variety of contaminants in various applications. SteriPure-P cartridge filters can provide the highest process efficiency and minimized filtration costs.

### »» Regulatory Compliance

FDA 21 CFR 177  
ISO 10993-Part 1, 5  
USP Class VI-121 °C  
Regulation (EC) No 1935/2004

## Specifications

### »» Materials of Construction

Filter membrane	Polyethersulfone
End-Filter membrane	Polyethersulfone
Supports	Polypropylene
Cage/End Caps	Polypropylene/SS 316L
Core	Polypropylene
Adaptor	Polypropylene
O-rings	Please refer to the ordering info

### »» Filter Dimensions

Outer Diameter	68.0mm
Inner Diameter	33.0mm
Filtration Area	0.55m <sup>2</sup> /10inch

### »» Safety

Bacterial Endotoxin	≤0.25EU/mL
Extractable	≤40mg/10inch

### »» Operating Parameters

Maximum Operating Temperature	80°C
Maximum Differential Pressure (Forward)	5.2bar@25°C
Maximum Differential Pressure (Reverse)	2.1bar@25°C

### »» Sterilizable

Autoclave	124°C,30min, 30cycles
	134°C,20min, 30cycles
Steam In-Place	124°C,30min, 30cycles
	134°C,20min, 30cycles

## Features

- Strong chemical compatibility
- High flux, low protein binding
- Proven sterile-grade filter cartridge
- Super long service life

## Application

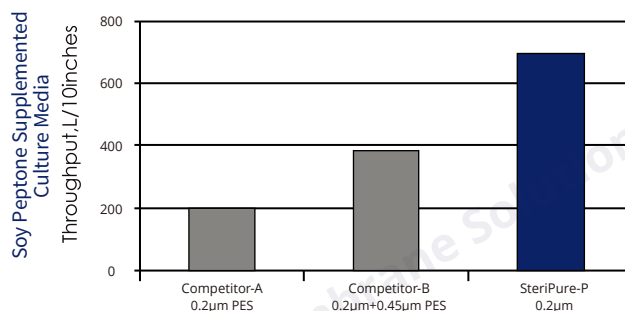
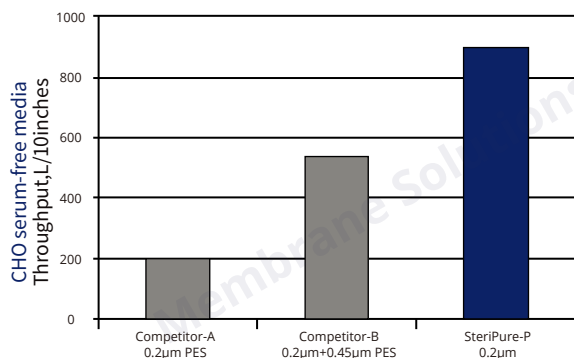
- Sterilization filtration of water for injection, cleaning solutions, purified water, deionized water, etc.
- Sterilization filtration of LVP, APIs, buffers, eye drops, disinfectants, etc.
- Sterilization filtration of vaccines, serums, biological products, antibiotic water-based liquid, etc.
- Filtration of red wine, beer, juice, purified water, etc.

## Longer Service Time and Excellent Cost-Effective

The built-in pre-filter membrane significantly increases the total throughput and stability of flow rate. In most time of your filtration process, SteriPure-P cartridge filters can provide high flow rate and low pressure drop due to the high asymmetric pre-filter membrane and controlled asymmetric end-filter membrane. SteriPure-P can effectively reduce the operating costs of filtration system, the cost of replacement filters and downtime in many applications.

MS-TM-E-0013-EN A/1

OUR MEMBRANE FOR YOUR SOLUTIONS



## Suitable for Severe High Temperature Sterilizing

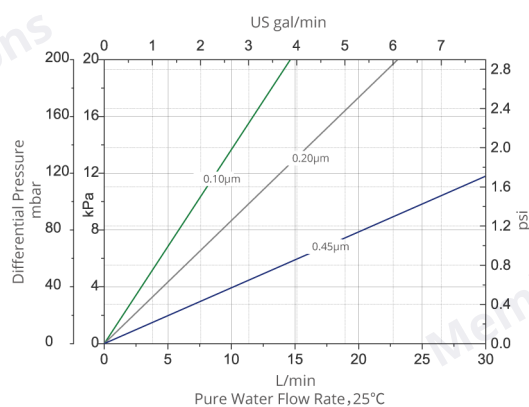
SteriPure-P can ensure integrity at temperature up to 134°C and pressure drop up to 0.5bar due to the high strength of Polyethersulfone membrane and enhanced Polypropylene structure. SteriPure-P can provide excellent filtration service for your process.

### » Integrity Test Data\*

Pore Size	Bubble Point	Diffusion
0.10µm+0.20µm	≥4.2bar	≤16ml/min@ 3.4bar
0.20µm+0.80µm	≥3.5bar	≤16ml/min@ 2.6bar
0.45µm+1.0µm	≥1.8bar	≤16ml/min@ 1.4bar

\*Test filter cartridge length 10 inches, Pure Water @25°C

## Typical Liquid Flow Rates



(Water / 1 cP fluid)

Typical flow rates. For liquids with viscosity differing from water, multiply the pressure drop by the viscosity in centipoise.

Unit conversion: 1 bar = 100 kPa = 14.5 psi

## Ordering Information\*

Filter Media	Length	Removal Rating	Adaptor	Sealing	Core
CRPESP: Polyethersulfone membrane	005 = 5inch 010 = 10inch 020 = 20inch 030 = 30inch 040 = 40inch	010=0.10µm+0.20µm 020=0.20µm+0.80µm 045=0.45µm+1.0µm	0=DOE 1=222/Flat with SS insert 2=222/Flat 3=222/Fin 4=222/Fin with SS insert 5=226/Fin with SS insert 6=226/Fin 7=226/Flat 8=226/Flat with SS insert	S=Silicone E=EPDM N=NBR F=FKM	Blank=PP R=GF Reinforced PP S=316L Stainless Steel

\* This information is a guide to the part number structure and possible options. For applications requiring autoclaving and sterilization, MS recommends the use of adaptor with SS insert to ensure filter sealing after cooling. If products that require autoclaving and sterilization use EPDM sealing rings and require customization. For availability of specific options and housing details, please contact MS.



USA

Phone: 1-866-528-4572  
Email: info@membrane-solutions.com  
Address: 4530 B STREET NW #A, AUBURN WA 98001, USA



China

Phone: 400-821-1812  
Email: info@membrane-solutions.com  
Address: 2202, No.1759 North Zhongshan Road, Shanghai 200061