

## Membrane Filtration

### BECO MEMBRAN PS Pure DL™

#### Double Layer Membrane Filter Cartridges for sterile filtration

BECO MEMBRAN PS Pure DL are double-layer sterilizing grade membrane filter cartridges with a retention rate of 0.1 µm.

The hydrophilic polyethersulfone (PES) membrane filter cartridge reliably retains microorganisms.

#### Features and Benefits

- The asymmetric polyethersulfone membrane provides high microbiological retention and can be integrity tested
- Easily wettable when performing the integrity test
- Wide chemical compatibility from pH 1 - 14

#### Configuration

BECO MEMBRAN PS Pure DL sterilizing grade membrane filter cartridges are made of high-quality polyethersulfone membranes. Polypropylene support fleeces protect the membrane and provides wide chemical compatibility, while the polypropylene cage and core help to ensure maximum mechanical stability.



#### Materials

<b>Pre-filter membrane:</b>	Polyethersulfone 0.2 µm
<b>Final filter membrane:</b>	Polyethersulfone 0.1 µm
<b>Support fleeces:</b>	Polypropylene
<b>Cage and core</b>	Polypropylene
<b>End cap/adaptor:</b>	Polypropylene, adaptor with reinforcing ring
<b>O-rings:</b>	Silicone (standard)

The plastic components meet the requirements of Directive 10/2011/EC and amendments. All materials used meet the FDA requirements according to 21 CFR.

### Technical Data

Nominal length	Filter area
10" (250 mm)	8.6 ft <sup>2</sup> (0.8 m <sup>2</sup> )
20" (500 mm)	17.2 ft <sup>2</sup> (1.6 m <sup>2</sup> )
30" (750 mm)	24.8 ft <sup>2</sup> (2.4 m <sup>2</sup> )

<b>Diameter:</b>	2.75 in (70 mm)
<b>Maximum operating temperature:</b>	176 °F (80 °C)
<b>Maximum differential pressure in flow direction:</b>	72.5 psid at 68 °F (500 kPa, 5.0 bar at 20 °C) 29 psid at 176 °F (200 kPa, 2.0 bar at 80 °C)
<b>Maximum differential pressure against flow direction:</b>	29 psid at 68 °F (200 kPa, 2.0 bar at 20 °C)

### Flow Rate

10" cartridge with water at 68 °F (20 °C)  
(standard values)



### Integrity Test

Types	Test pressure psig (bar)	Max. diffusion rate per 10" (250 mm) cartridge
PSP01	58 (4.0)	<= 35 ml/min

### Titer Reduction

Pore size	Test organism	Titer reduction/cm <sup>2</sup> (LRV)
PSP01 (0.1 µm)	<i>Brevundimonas diminuta</i>	> 10 <sup>7</sup> (LRV > 7)
	<i>Acholeplasma laidlawii</i>	> 10 <sup>7</sup> (LRV > 7)

### Adapter Codes

Code 7
Single open end (SOE) 2-226 O-ring double bayonet adapter with spear



## Ordering Information

BECO MEMBRAN PS Pure DL sterilizing grade filter cartridges with protective foil in carton.

Type	Retention rating	Adapter	Nominal length	Gasket
PSP	01 = 0.10 µm	7 = Code 7	1 = 10" (250 mm)	S = Silicone
			2 = 20" (500 mm)	
			3 = 30" (750 mm)	

## Example

PSP	01	7	1	S
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BECO MEMBRAN PS Pure DL sterilizing grade membrane filter cartridges; 0.1 µm retention rating; Code 7, 10" (250 mm); silicone gasket

## Sterilization

### Steam Sterilization

With steam at 273 °F (134 °C)/7.25 psig (50 kPa, 0.5 bar differential pressure max).

Duration: 30 minutes after steam emerges from all openings of the filtration system.

## Safety

When used as directed and handled correctly, there are no known unfavorable effects associated with this product. BECO MEMBRAN PS Pure DL sterilizing grade membrane filter cartridges do not require the provision of safety-relevant information.

Storage, handling and transport does not present any environmental and health risks.

## Disposal

BECO MEMBRAN PS Pure DL sterilizing grade membrane filter cartridges should be treated as industrial waste. Any local and other official regulations in relation to the filtered product must be followed.

## Storage

Store BECO MEMBRAN PS Pure DL sterilizing grade membrane filter cartridges in their original packaging and in a dry, odor-free and UV ray protected place.

Use filter cartridges within 60 months after production date.

## Certified Quality

During the production process, BECO MEMBRAN PS Pure DL sterilizing grade membrane filter cartridges are regularly monitored to ensure consistent excellent quality control and are tested for 100% integrity as a part of the manufacturing process.

**North America**  
44 Apple Street  
Tinton Falls, NJ 07724  
Toll Free: 800 656-3344  
(North America only)  
Tel: +1 732 212-4700

**Europe/Africa/Middle East**  
Auf der Heide 2  
53947 Nettersheim, Germany  
Tel: +49 2486 809-0

Friedensstraße 41  
68804 Altlufheim, Germany  
Tel: +49 6205 2094-0

An den Nahewiesen 24  
55450 Langenlonsheim, Germany  
Tel: +49 6704 204-0

**China**  
No. 3, Lane 280,  
Linhong Road  
Changning District, 200335  
Shanghai, P.R. China  
Tel: +86 21 5200-0099

**Singapore**  
100G Pasir Panjang Road #07-08  
Singapore 118523  
Tel: +65 6825-1668

**Brazil**  
Av. Ermano Marchetti, 1435 -  
Água Branca, São Paulo - SP,  
05038-001, Brazil  
Tel: +55 11 3616-8461

**For more information, please  
email us at [filtration@eaton.com](mailto:filtration@eaton.com)  
or visit [www.eaton.com/filtration](http://www.eaton.com/filtration)**

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