Masterfilter

Masterfilter PESEP series filter cartridges are specifically designed to very fine filtration with a unique capacity to reduce the bioburden level of Pharmaceutical and Biological solutions. Thanks to its unique single layer, asymmetric hydrophilic polyethersulfone membrane, this filter is characterized by an excellent throughput and a higher durability in many applications. The result is the most reliable, economical and efficient particulate and microbial removal than any other microbial filter can offer



# Application

- Biological
- Buffer and colture media
- Ophthalmics
- Antibiotics
- Mineral Water
- Wine

# **Features and Benefits**

- High dirt holding capacity
- Excellent flow rates and longer service life
- Large chemical compatibility and very low adsorption level
- Wide range of removal rate from 1,2 to 0,2 μm allows the best choice for different applications
- All the materials used in this filter meet the requirements of US 21 CFR and E

## Materials of Construction

- Filter media: Asymmetric PES
- Support Layers: Polypropylene
- Inner Core: Polypropylene
- Outer Cage: Polypropylene
- End Caps: Polypropylene
- **O-Rings:** Silicone or EPDM

## **Operating Parameters**

Max differential pressure:	4,0 bar (25°C)
	2,4 bar (70°C)
Max operating temperature:	90°C
In situ Hot Water Sanitization:	80°C
<ul> <li>Autoclaving:</li> </ul>	130°C
In-situ steam sterilization:	121°C, 1 bar
	20 minutes



# **Biological Safety & Quality Standard**

- Comply with USP Plastics Class VI 121 °C and ISO10993 equivalents
- Bacterial Endotoxin: Aqueous extraction of autoclaved filter contains < 0.25 EU/mL as determined by Limulus Amebocyte Lysate (LAL), USP <85>
- Non-fiber Releasing: Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3 (b) (6)
- Component Material Toxicity: Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics
- Comply with the relevant requirements of EU 1935/2004 and EU directive 2002/72/EC
- Manufactured for use in conformance with cGMP

#### Pressure Drop vs Flowrate PESEP 010/020/045/120 500 450 Differential Pressure (mbar) 010 400 350 020 300 045 250 200 120 150 100 50 0 10 40 0 20 30 50 Water Flow Rate (L/min), 10 inch

## **Effective Filtration Area (EFA)**

0,6 m2 / Ø 69mm and 10" module

## Part Numbers

PESEI		. [		-		-		)
Code	Removal rating Micron	Code	Le mm	ngth inch	Code	End caps	Code	O-Rings
010	0,1	05	65	5	STC	Sartorius code 28	S	Silicone
020	0,2	10	254	10	нтс	222 O-ring/flat (Code 3)	E	EPDM
045	0,45	20	508	20	HSF	226 O-ring/fin (Code 7)	V	Viton
065	0,65	30	762	30	HSC	226 O-ring/flat top		
120	1,2	40	1016	40	STZ	DHZ Z		
500	5,0				CP2	R-2"		
					CP1	R-1"		
					HSH	H code		
					HSU	MCY 1001		
					SLK	Sealkleen retrofit		