

Alioth Membrane Filter

Chemical Compatibility

High Retention

Moist Heat Sterilization

Gamma Irradiation



⊕ Product Introduction

Alioth Membrane Filter is made from hydrophilic polyethersulfone (PES) membrane, and placed in a compatible membrane holder. It can remove particles and microorganisms from liquids, thus very suitable for the development and validation of early-stage filtration process. Besides, it can withstand multiple cycles of high-temperature and high-pressure sterilization, meeting the common requirements for liquid filtration in pharmaceutical industry.

⊕ Key Features and Benefits

- Excellent chemical compatibility
- Excellent wettability
- High retention capacity
- Low adsorption
- Excellent optical properties
- Appropriate flow rate
- Few extractables
- Resistance to multiple steam sterilization
- Resistance to gamma irradiation sterilization
- Original membrane integrity tested
- Stable performance and sturdy durability
- Available materials: PES/PTFE/MCE/PP/GF/PSF
- Available diameters: 47 mm, 90 mm, 142 mm, 200 mm
- Easy and flexible to operate, user-friendly

Alioth Membrane Filter

⊕ Product Specifications

Membrane	Polyethersulfone (PES)			
Diameter	47 mm	90 mm	142 mm	200 mm
Effective Filtration Area	13 cm ²	50 cm ²	141 cm ²	255 cm ²
Thickness	Approximately 110 µm			
Pore Size	0.2 µm/0.45 µm/0.45+0.2 µm/0.65+0.2 µm/0.8+0.2 µm/1.2+0.2 µm			
Maximum Operating Temperature	Can withstand moist heat sterilization			
Integrity	As an example, for PES A series with a single layer of 0.2 µm, bubble point is 4.8±0.5 bar			
	As an example, for PES C series with a single layer of 0.2 µm, bubble point is 4.3±0.5 bar			
Water Permeability	As an example, for PES A series with a single layer of 0.2 µm, water flux is ≥45 mL/bar/min/cm ²			
	As an example, for PES C series with a single layer of 0.2 µm, water flux is ≥35 mL/bar/min/cm ²			
Bacterial Retention	>10 ⁷ cfu/cm ² <i>B.diminuta</i> (ATCC® 19146™)			
Biological Safety	All construction components meet the biological safety requirements referring to USP <88> Class VI plastic and USP <87>			
Quality System	Manufactured in a facility whose Quality Management System has been certified with ISO 9001			
Manufacturing Environment	Manufactured in conformance with cGMP			
Shelf Life	3 years at 10–35°C and below 70% humidity			

⊕ Ordering Information

Product format	Membrane	Pore size	Size	Package
MF=Membrane filter	EC=PES material C series ED=PES material D series	02=0.2 µm 04=0.45 µm 52=0.45+0.2 µm 62=0.65+0.2 µm 82=0.8+0.2 µm 12=1.2+0.2 µm	047=47 mm 090=90 mm 142=142 mm 200=200 mm	25=25/PK