

Hydrophilic PTFE Membrane

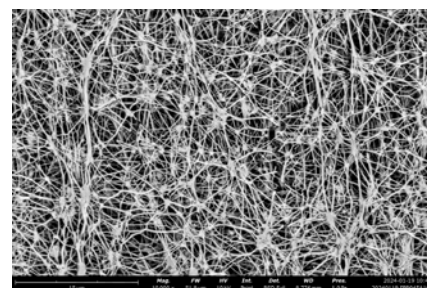


OUR MEMBRANE FOR YOUR SOLUTIONS

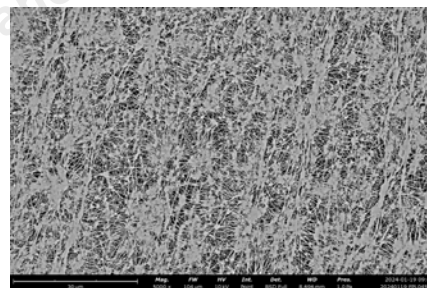
MS-TM-E-4001-EN A/1

Description

The hydrophilic PTFE membrane provided by MS includes hydrophilic composite membrane and hydrophilic pure membrane. Among them, the hydrophilic composite membrane is made by thermal coating ePTFE membrane with PP, PET and other non-woven fabrics, and then by surface hydrophilic treatment technology. Hydrophilic PTFE membrane, free of binder, surfactant and soluble substances, has high peel strength, excellent and stable hydrophilicity, low protein adsorption, and is widely used in the filtration of aqueous solutions. In addition, MS uses unique modification technology to enhance the interaction between the hydrophilic layer and the PTFE membrane surface, resulting in a long lifespan and the ability to be used in various chemical environments.



Before Modification



After Modification



Contact angle of PTFE hydrophilic membrane

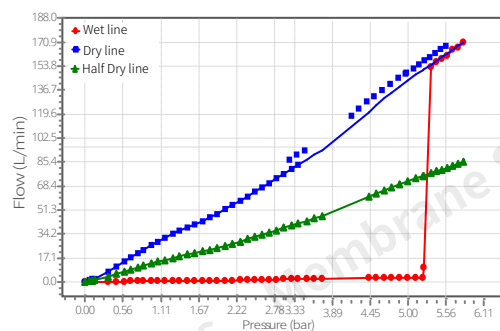
Applications

- Pharmaceutical industry: eye drops filtration, antibiotic filtration, aqueous solution in API filtration, API in high temperature strong alkaline solution filtration
- Strong corrosive aqueous solution: resin and solvent, etcher, high concentration of acid, photoresist, batch chemical
- Water treatment: electronic industry ultrapure water preparation
sewage treatment: chemical wastewater, organic solvent wastewater, landfill leachate, food industrial wastewater, industrial wastewater

Features

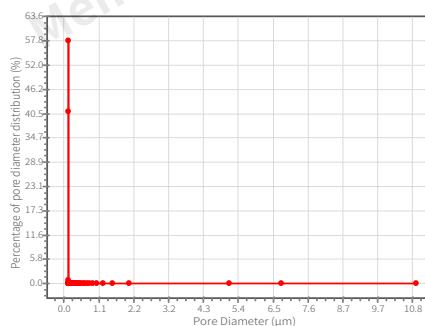
- Strong hydrophilicity
- Low protein adsorption
- Easy to weld
- Long service life
- High flux, low extractables
- Anti-pollution
- High cleanliness

The Curve of Flow-Pressure



The curve of flow-pressure curve of 0.22μm PTFE membrane

Pore Diameter Distribution



Pore diameter distribution curve of 0.22μm PTFE membrane

Specification

Membrane Type	Pore Size (μm)	Thickness (μm)	Water Flow Rate (ml/min/cm ²) 23°C, Δp=-10psi	Bubble Point (23°C,psi)	Particle Retention Efficiency	Remarks
Unsupported	0.03	12-15	3.0-3.5	60-84(60% IPA)	/	The thickness of the PTFE film and support can be customized
	0.05	10-20	3.5-5	57-83(60% IPA)	94.32%@0.05μm	
	0.1	10-20	5-10	49-68(60% IPA)	95.65%@0.1μm	
	0.22	10-20	12~20	70-87 (water)	96.56%@0.3μm	
	0.45	10-20	25~40	48-61 (water)	95.78%@0.5μm	
	1.0	8-15	100~150	13-29 (water)	/	
	3.0	8-15	150~250	2.9-16 (water)	/	
	5.0	8-15	350~420	/	/	
	10	130-190, 200-280	500~800	/	/	
Supported	0.05	130-190, 200-280	3.0~3.5	43-65(60% IPA)	95.77%@0.05μm	
	0.1	130-190, 200-280	4.5~10	35-44(60% IPA)	98.71%@0.1μm	
	0.22	130-190, 200-280	12~20	51-65 (water)	99.34%@0.3μm	
	0.45	130-190, 200-280	25~40	29-44 (water)	97.03%@0.5μm	
	1.0	130-190, 200-280	100~150	/	/	
	3.0	130-190, 200-280	150~250	/	/	
	5.0	130-190, 200-280	350~420	/	/	
	10	130-190, 200-280	500~800	/	/	

Ordering Information

Series Code	Pore Size	Support Material Code
FPL	010=0.1μm 022=0.22μm 045=0.45μm 100=1.0μm 300=3.0μm 500=5.0μm	A12—PP Support A16—PP Support H60—PE/PP Support H80—PE/PP Support B51—PET Support N—Without Support



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