

LeSiever® Hydrophilic PP Filter

LeSiever® Hydrophilic PP (Polypropylene) Filters are made from high-quality melt-blown polypropylene membranes. They deliver reliable chemical stability, heat resistance, high flux, long service life, and strong corrosion resistance. These filters are widely used for pre-filtration in biopharmaceutical, chemical, and food & beverage applications. Designed for pharmaceutical processes, they provide stable and consistent particle retention. Every filter is factory-tested and released to ensure compliance with current regulatory and industry standards.



Product Advantages

- Excellent particle retention efficiency
- Good chemical stability
- High capacity and high throughput
- Long service life
- Excellent chemical compatibility with a broad pH range

Typical Applications

- Pre-filtration of beverages
- Pre-filtration of chemical reagents
- Pre-filtration of process liquid
- Clarification filtration of fermentation broths
- Pre-filtration of chemical Intermediates



Technical Parameters of Disc and Capsules

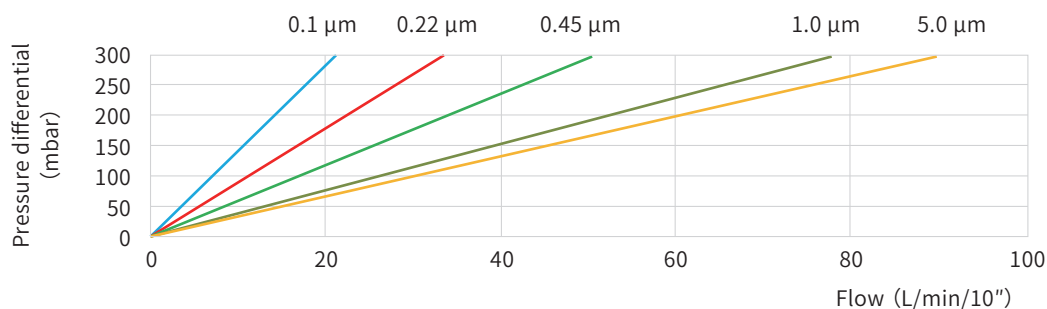
Dimensions	D2	D6	S1/S2	S3/S4	S5	2"	4"	5"	10"	20"
Area	2.8cm ²	17.3cm ²	180cm ²	300cm ²	550cm ²	0.13m ²	0.23m ²	0.33m ²	0.66m ²	1.32m ²
Constituent Materials										
Filter membrane	Polypropylene (PP)									
Supports	Polypropylene (PP)									
Housing	Polypropylene (PP)									
O-Ring	Silicone									
Maximum Operating Pressure Differential										
Forward	180 cm ² : 4 bar, others:5 bar									
Reverse	180 cm ² : 2 bar, others:2.5 bar									
Sterilization Conditions										
Autoclave	126°C, 60 minutes, 25 cycles (online steam sterilization not supported)									
Regulatory Compliance										
pH and Conductivity	Complies with USP <645> limit of <1.3 μS/cm at 25°C									
TOC	Complies with USP <643> TOC specified limit of <0.5 mg/L									
Endotoxins	Complies with USP endotoxin level of <0.25 EU/mL									
Non-Fiber Releasing	Complies with the 'Non-Fiber Releasing' standard as defined in 21 CFR 210.3 (b) (6)									
Oxidizable Substances	Filtered filtrate meets USP requirements for sterile water for injection									
Particulates	Filtered filtrate complies with USP <788> particulate release requirements									
Biocompatibility	Compliant with USP <87> and USP <88> Compliant with ISO 10993-4, 5, 6, 10, and 11									
Physicochemical Test	The polymer materials used in the filter comply with the physicochemical testing standards specified in USP <661>.									

Technical Parameters of Cartridges

Dimensions	2.5	05	10	20	30	40
Area	0.17 m²	0.33 m²	0.66 m²	1.32 m²	1.98m²	2.64 m²
Constituent Materials						
Filter membrane	Polypropylene (PP)					
Supports	Polypropylene (PP)					
Housing	Polypropylene (PP)					
O-Ring	Silicone					
Maximum Operating Pressure Differential						
Forward	0.5 MPa@25°C // 0.45 MPa@40°C // 0.4MPa@60°C // 0.2 MPa@80°C					
Reverse	0.3 MPa@25°C // 0.1 MPa@80°C					
Sterilization Conditions						
SIP Autoclave	134°C, 30 minutes, 30 cycles (pressure differential not exceeding 350 mbar).134°C, 30 minutes, 30 cycles					
Regulatory Compliance						
pH and Conductivity	Complies with USP <645> specified limit o f <1.3 µS/cm at 25°C					
TOC	Compliant with USP <643> TOC limit of <0.5 mg/L					
Endotoxins	Compliant with USP endotoxin level of <0.25 EU/mL					
Non-Fiber Releasing	Complies with the 'Non-Fiber Releasing' standard as defined in 21 CFR 210.3 (b) (6)					
Oxidizable Substances	Filtered filtrate meets USP requirements for sterile water for injection					
Particulate	Filtered filtrate complies with USP <788> particulate release requirements					
Biocompatibility	Compliant with USP <87> and USP <88> Compliant with ISO 10993-4, 5, 6, 10, and 11					
Physicochemical Test	The polymer materials used in the filter comply with the physicochemical testing standards specified in USP <661>.					

Note: LePure Biotech offers a range of hydrophilic PP filters designed for different application scenarios. The product series vary in models, specifications, and performance characteristics, including key parameters such as effective filtration area, integrity test data, and maximum sterilization limits. Since specific parameters vary by series, please contact LePure Biotech's technical support team for detailed technical information based on your application requirements.

Water Flow Rate



Ordering Information

LeSiever® Hydrophilic PP Capsule Filter

N	P	1	P	1	A	0	5	T	T	1
Area	Industry	Filter Type	Material	Pore Size	Sterilization Methods	Filter Size		Connector		Package
N: Overseas	P:Pharmaceutical	1: Capsule	P: PP membrane	1:0.2 μm	A:Autoclavable, no sterilized	S1:180 cm ²		T=38mm (1.5") TC connector		1: 1 piece/package
		2:Disc Type		2: 0.1 μm		S3:300 cm ²		F=19.1mm (3/4") TC connector		3: 3 pieces/package
		3:syringe needle		3: 0.45 μm		S5:550 cm ²		H=12.7mm (1/2" hose barb connector)		4: 4 pieces/package
				9: 0.65 μm		02: 2"		B=19.1mm (3/4"hose barb connector)		6: 6 pieces/package
				A: 0.8 μm B:1.2 μm		04: 4"		O=1/4~1/2"(6.4~12.7 mm) Multiple steeped hose barb (Capsule)		X: 10 pieces/package
				D: 1.0 μm		05: 5"				
				E: 3 μm		10: 10"				
				F: 5 μm		20:20"				
				R: 10 μm						
				W: 20 μm						
				X: 30 μm						
				Y: 50 μm						
				Z: 100 μm						
*Connector and dimension matching instructions: F,0 (D5-4 inches): B (20)										
**Package and dimension matching instructions. pieces/package:D2(50)D5(10),S1-S4(6),s5/02(4),04(3),05/10/20(1)										

Connector Information of Capsules

Size vs Connector Code	N	O	H	F	T	B
	1/4"-1/2" Multiple stepped hose barb	1/4"-1/2" Multiple stepped hose barb	1/2"(12.7 mm)hose barb Connector	3/4"(19.1 mm)TC25 Connector	3/2"(38 mm) TC50 Connector	3/4"(19.1 mm)hose barb Connector
S1	n.a.	●	n.a.	●	n.a.	n.a.
S3	n.a.	●	n.a.	●	n.a.	n.a.
S5	n.a.	●	●	●	●	n.a.
2"	n.a.	●	●	●	●	n.a.
4"	n.a.	●	●	●	●	n.a.
5"	n.a.	n.a.	●	n.a.	●	n.a.
10"	n.a.	n.a.	●	n.a.	●	n.a.
20"	n.a.	n.a.	n.a.	n.a.	●	●

Note: ● = the adapter type is available.
n.a.=Not Applicable.

LeSiever® Hydrophilic PP Cartridge Filter

N	1	D	P	1	S	2	5	D	N	S	
Area	Industry	Filter Type	Material	Pore Size	Upper cap	Size		Center Tube and Connector		Gasket	
N:International	1:Pharmaceutical industry	D:Filter cartridge	P:PP membrane	1:0.2 μm	S:Triangular fin	25:2.5 inch		DN: PP center tube with 222inner steel ring		S:Silicone rubber	
	2:Electronic Industry				2:0.1 μm	Z:Cylindrical sharp corner	05:5 inch		EN: PP center tube with 226 inner steel ring		V:Fluorine rubber
	3:F&B industry				3: 0.45 μm	P:Flat end cap	10: 10 inch		E: PP center tube with 226 connector		Y: EPDM rubber
					9: 0.65 μm	LP:Two flat port (For LP interface:Add size and seal directly to the suffix. eg.:N1DPFLP30S)	20:20 inch		D:PP center tube with 222connector		F:Nitrile butadiene rubber(NBR)
					A: 0.8 μm			30: 30 inch			WV: Outer tetrafluoroethylene rubber
					B:1.2 μm			40:40 inch			
					D:1.0 μm	*Special type:					
					E:3 μm	PP71:P7001					
					F:5 μm	PP72:P7002					
					R: 10 μm	PSE2:2 inch small 226 cap (126A)					
		W: 20 μm	PP4:P4440,four claws								
		X: 30 μm	PM8:MP 5112, eight claws								
		Y:50 μm	PSF7:S15-7								
		Z:100 μm	PSF8:S15-8								
			PSF9:S15-9								

* Note:

1. Each letter and number in the item code has a specific meaning. This coding rule is for reference only, and not all combinations represent a valid product model.

2. For product selection guidance, please contact our technical support team.