

LeSiever™ Hydrophobic PTFE Filter

The LeSiever™ Hydrophobic PTFE Filter Series combines excellent hydrophobicity, high gas permeability, and broad chemical compatibility. Designed to deliver efficient gas flow with strong particle retention, it is an ideal choice for gas filtration applications such as inert gas and air, including both pre-filtration and sterile filtration. With resistance to a wide range of chemical reagents, solvents, and acidic or alkaline solutions, the filters ensure long service life and consistently reliable performance.

Advantages

- Excellent Hydrophobicity
- Low extractable
- Excellent chemical compatibility
- Reliable gas flowability
- Long service life
- Broad temperature and pH tolerance
- Full product series

Applications

- Non-aquatic product filtration
- Gas Filtration (e.g., inert gases, air)
- Vent and exhaust filter
- Filtration of Chemical Reagents & Solvents
- Liquid Filtration in Non-aqueous Solutions
- Sterile filtration



Technical Parameters of Disc and Capsules

Filter size	D5	S1	S6	S5	2"	4"	5"	10"	20"
Area (m²)	20 cm²	180 cm²	300 cm²	550 cm²	0.13 m²	0.23 m²	0.33 m²	0.66 m²	1.32 m²
Composition Material									
Filter Membrane	Hydrophobic PTFE								
Supports	Polypropylene(PP)								
Housing	Polypropylene(PP)								
O Ring	Silicone								
Integrity Test Only for 0.2 µm									
Water Intrusion Test (WIT)@ 2.6bar 22 psi, ambient(≤mL/min)	/	/	/	/	0.16	0.27	0.38	0.76	1.52
Bubble Point , ambient	≥ 1350 mbar (19.6 psi),60/40 % IPA/Water								
Bacterial Retention	According to ASTM F838 test methods, the retention performance was evaluated using <i>Brevundimonas diminuta</i> (ATCC® 19146™) at a challenge level of 10 ⁷ CFU/cm² in both forward and reverse flow.								
Endotoxin	< 0.25 EU/mL								
Sterilization Method									
Autoclavable	126 °C,60 min,25 cycles								
Cumulative Steaming Time	126°C,1500 min (1 hour/cycle)								
No Fiber Release	Complies with the 'No Fiber release' regulations in 21 CFR 210.3 (b) (6)								
Biocompatibility	Passed USP <87> and USP <88> test								

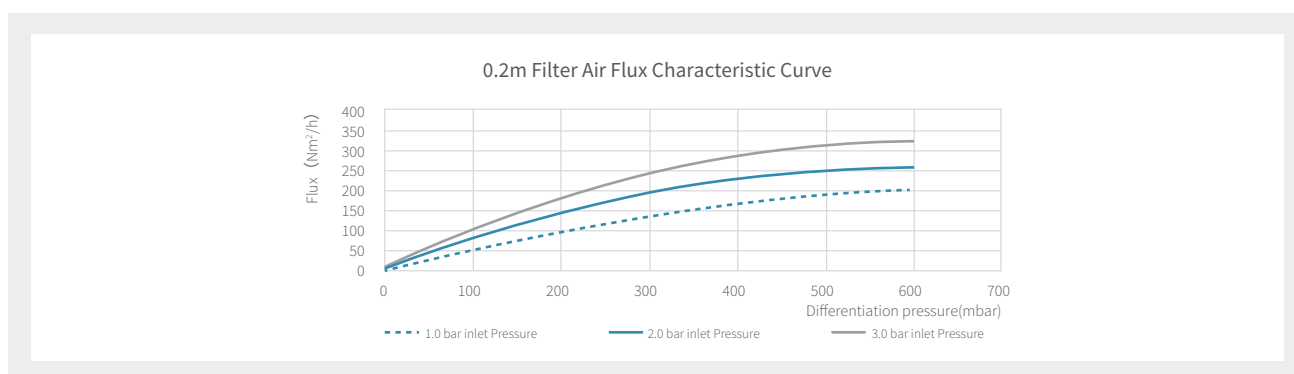
Note: LePure Biotech provides multiple hydrophobic PTFE filters tailored to diverse application scenarios. The different product series vary in model, specifications, and performance parameters, primarily including key parameters such as effective filtration area, integrity data, and maximum sterilization limits. Specific product parameters differ among series. It is advised to contact LePure Biotech's technical support team to obtain detailed technical product information according to actual application requirements.

Technical Parameters of Cartridges

Filter size	25	05	10	20	30	40
Area	0.17 m²	0.33 m²	0.66 m²	1.32 m²	1.98 m²	2.64 m²
Composition Material						
Filter Membrane	Hydrophobic PTFE					
Supports	Polypropylene (PP)					
Housing	Polypropylene (PP)					
O Ring	Silicone,Fluorine,EPDM,Outer tetrafluoroethylene rubber					
Integrity Test						
Water Intrusion Test (WIT) @ 2.6bar 22 psi, ambient(≤mL/min)	0.19	0.38	0.76	1.52	/	/
Bubble Point, ambient	≥ 1350 mbar (19.6 psi), 60/40 % IPA/Water					
Bacterial Retention	According to ASTM F838 test methods, retention testi <i>Brevundimonas diminuta</i> (ATCC® 19146™) was performed at a challenge level of 10 ⁷ CFU/cm² in both forward and reverse flow.					
Endotoxin	< 0.25 EU/mL					
Sterilization Method						
SIP	134 °C,30 min, 200 cycles					
Cumulative SteamingTime	134 °C,6000 min (30 min/cycle)					
No Fiber Release	Complies with the 'No Fiber release' regulations in 21 CFR 210.3 (b) (6)					
Biocompatibility	Passed USP <87> and USP <88> test					

Note: LePure Biotech offers a range of hydrophobic PTFE 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.

Air Flow Rate



Ordering Information

LeSiever™ Hydrophobic PTFE Capsule Filter

N	A	1	F	1	A	0	5	T	T	1
Area	Industry	Filter Type	Membrane Material	Pore Diameter	Sterilization Methods	Filter Size		Connector		Package Specification
N: Overseas	A: Air	1: Capsule	F: Hydrophobic PTFE	1: 0.2 μm	A:Autoclavable, Non sterilized	D2: 25 mm Syringe		T=38 mm(1.5") TC connector		1:1 P/K
	P: Liquid	2: Disc Type		2: 0.1 μm		D5:50 mm disc		F=19.1 mm(3/4") TC connector		3:3 P/K
		3: Syringe needle		3: 0.45 μm		S1:180 cm ²		H=12.7 mm (1/2") hose barb connector		4:4 P/K
				5: 0.45/0.2 μm		S6:300 cm ²		B=19.1 mm(3/4") hose barb connector		6:6 P/K
				D:1.0 μm		S5:550 cm ²		O=1/4~1/2" (6.4~12.7 mm) Multiple steeped hose barb		X: 10 P/K
						02:2"		N=1/4~1/2"(6.4~12.7 mm) Multiple steeped hose barb(Disc)		Y: 50 P/K
	04:4"					L=Luer connector		M: For Assembly		
	05:5"									
	10:10"									
	20:20"									
Minimum packaging for capsules of different sizes (Packaging unit:P/K):D2(50),D5(10),S1(6), S5/S6/2"(4), 4"(3), 5"/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.
S6	n.a.	●	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™ Hydrophobic PTFE Cartridge Filter

N	1	D	F	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	F: Hydrophobic PTFE-Air	1: 0.2 μm	S: Triangular fin	25: 2.5 inch		EN: PP center tube 226 inner steel ring		S:Silicone
	2: Electronic Industry			2:0.1 μm	Z: Cylindrical sharp corner	05: 5 inch		DN: PP center tube with 222 inner steel ring		V:Fluorine
	3: F&B Industry			3:0.45 μm	P: Flat end cap	10: 10 inch		HEN: Stell center tube with 226 inner steel ring		Y:EPDM
				5:0.45/0.2 μm	LP:Two Flat port	20: 20 inch		D: PP center tube with 222 cap		WV: Outer tetrafluoroethylene rubber
				6:0.2/0.1 μm		30: 30 inch		E: PP center tube with 226 cap		
				J:0.2/0.2 μm		40: 40 inch				
				M:0.45/0.45 μm	Special Type					

Note:

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

