ProcessGard[®] ATE Liquid Filters

Cost-effective, hydrophobic PTFE/PFA filters for advanced chemical applications

ProcessGard[®] ATE filters offer a cost-effective alternative for advanced chemical applications. Designed for aggressive aqueous chemicals and solvent applications, the hydrophobic PTFE membrane maximizes surface area to improve flow rate performance and increase device yields at elevated temperatures. Ideal for medium- to high-flow extended lifetime applications, ProcessGard ATE filters remove particles from a wide range of acids, bases, and other process chemicals. In addition, the PTFE/ PFA fluorine resin materials and thermally bonded construction minimize chloride, metal extractables, and other contaminants that can impact yield and throughput.

ProcessGard ATE filters are available in 10" and 20" lengths with 0.5 μ m, 0.2 μ m, 0.1 μ m, 0.05 μ m, and 30 nm retention ratings to balance performance with cost of ownership. The dry configuration has a 30 nm retention rating for solvent filtration. The optional prewet configuration ships 0.9% H₂O₂ wet, enabling rapid startup in aqueous chemicals while avoiding alcohol-chemical interactions.



APPLICATIONS

- High-flow chemical applications in chemical and display market applications
- Bulk chemical manufacturing
- Bulk chemical delivery systems
 (BCDS)
- Aggressive aqueous chemistries
- Advanced solvents

Note: ProcessGard ATE filters are not recommended for high-outgassing solutions like SPM, SC1, and SC2. Entegris recommends QuickChange® NX filters for these applications.



FEATURES & BENEFITS

Retention ratings	Removes particles from a wide range of acids, bases, and other process chemicals		
	Requires minimal setup time, promoting a lower cost of ownership in advanced chemical processes		
	Ideal for high-flow extended lifetime applications		
	Dry configuration has a 30 nm retention rating		
Rugged materials of construction	 Hydrophobic membrane's increased surface area Improves flow rate performance with low pressure drop Enables higher throughput and increased yield at elevated temperatures 		
	 PTFE/PFA fluorine resin materials and thermally bonded PFA construction Ensures excellent chemical compatibility Minimizes chloride and metals extractables that can impact process performance Enables low particle shedding, which increases yield and throughput 		
Cost-effective prewet cartridge filter option	 Ships 0.9% H₂O₂ wet* Allows for rapid startup in aqueous chemicals Prevents alcohol-chemical interactions 		

SPECIFICATIONS

Materials of construction	Membrane	Hydrophobic PTFE		
	Supports, Core, sleeve,end caps, and Chemlock key	PFA		
	O-ring	E-FKM		
Retention ratings**	0.5 μm, 0.2 μm, 0.1 μm, 0.05 μm, 30 nm			
Membrane surface area	10": 2.1m2 (22.6 ft ²) 20": 4.2m2 (45.21 ft ²)			
Metallic extractables	Testing conducted for 23 metals			
Operating conditions	Maximum operating pressure:			
	0.58 MPa (5.8 bar, 84 psi) @ 25°C (77°F)			
	Maximum forward differential pressure:			
	0.44 MPa (4.4 bar, 64 psi) @ 25°C (77°F)			
	0.05 MPa (0.5 bar, 7.5 psi) @ 180°C (356°F)			
	Maximum reverse pressure:			
	0.34 MPa (3.4 bar, 50 psi) @ 25°C (77°F)			
	Maximum operating temperature: 180°C (356°F)			

*The prewet option ships 0.9% H_2O_2 wet. Contact Entegris for proper use and handling. **30 nm retention rating applies to solvent filtration (dry configuration only).

Note: ProcessGard ATE filters are PFOA free. Shelf life (prewet option) is one year.

DIMENSIONS



Cartridge length	A (overall)	B (control)	C (shoulder)
10"	244 mm (9.61")	227 mm (8.94")	225 mm (8.86")
20"	471 mm (18.54")	454 mm (17.87")	452 mm (17.80")

PERFORMANCE DATA



ProcessGard ATE 20" Filter



ORDERING INFORMATION

ProcessGard ATE: part number



*30 nm retention rating applies to solvent filtration (dry configuration only).

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit <u>entegris.com</u> and select the <u>Contact Us</u> link to find the customer service center nearest you.

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