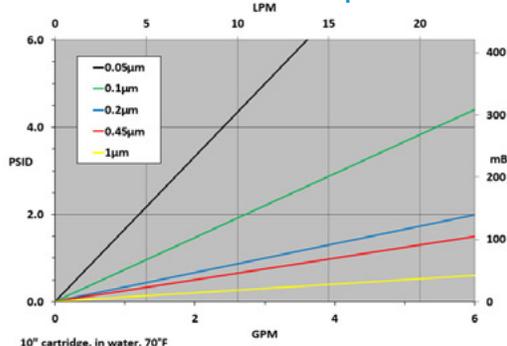


GFL-Series FluoroClear™ Pleated All-Fluoropolymer

GFL-Series High Purity FluoroClear Filter Cartridges are designed for highly aggressive wet-etch and cleaning applications in the micro-electronics industry. Constructed with 100% fluoropolymer materials, the ECTFE hardware and support layers provide broad chemical compatibility and temperature resistance. The PTFE membrane delivers high flow rates and high purity effluent at low pressure drops. Cartridges are available as either flushed & dried or wet-packed in high purity DI water with hydrogen peroxide preservative. FluoroClear cartridges are manufactured in a cleanroom environment to ensure product cleanliness. Manufactured in a clean-room environment to maintain high standards of purity and cleanliness.



Flow Rate vs Pressure Drop



Typical Applications

- Wet-etch & cleaning chemicals:
 - Sulfuric Acid
 - Hydrofluoric Acid
 - Phosphoric Acid
 - Nitric Acid
- Photo-resists
- Ozonated Process Streams

Ordering Information

GFL	Rating (µ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
	0.05 (5nm)		10" (25.4 cm)		2 = DOE Flat Gasket	T = Teflon® Encapsulated Viton®		E = Flushed & Dried
	0.1		20" (50.8 cm)		3 = 222 w/ Fin	Z = Teflon® Encapsulated Silicone		W = Wet-Packed
	0.2		30" (76.2 cm)		4 = 222 w/ Flat Cap			
	0.45		40" (101.6 cm)		6 = 226 w/ Flat Cap			
	1.0				7 = 226 w/ Fin			

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.

Construction Materials

- Membrane**..... PTFE
- Support Media**..... ECTFE
- End Caps**..... ECTFE
- Center Core**..... ECTFE
- Outer Support Cage**..... ECTFE
- O-Rings/Gaskets**..... Teflon® Encapsulated Viton®, Teflon® Encapsulated Silicone

Sanitization/Sterilization

FluoroClear cartridges may be sanitized using compatible chemical agents. FluoroClear cartridges may not be autoclaved or steam sterilized.

Integrity Testing

- 0.05µ ≤ 5 cc/min at 40 psig (2.76 bar)
- 0.1µ ≤ 5 cc/min at 40 psig (2.76 bar)
- 0.2µ ≤ 5 cc/min at 30 psig (2.07 bar)
- 0.45µ ≤ 5 cc/min at 20 psig (1.38 bar)
- 1.0µ ≤ 5 cc/min at 15 psig (1.38 bar)

Toxicity

All components meet the specifications for biological safety per USP Class VI – 121°C for plastics.

Dimensions

- Length:**
10 to 40 inches (25.4 to 101.6 cm) nominal
- Outside Diameter:**
2.70 inches (7.0 cm) nominal

Operating Conditions

- Change Out ΔP (recommended)**..... 35 PSID
- Temperature (max)**..... 215°F (102°C)
- Differential Pressure (max)**..... 60 PSID (4.1 bar) at 68°F (20°C)

FDA Listed Materials

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are deemed safe for use in contact with foodstuffs in accordance with EU Directives 2002/72/EC, 1935/2004, and/or 10/2011.