

PREPOR GF liquid filter cartridges are utilised for the clarification, stabilisation and bioburden reduction of aqueous solutions, media and biologicals.

These filters have a high dirt holding capacity and exhibit exceptional flow performance compared to polypropylene filters. The hydrophilic nature of PREPOR GF filter cartridges also makes them more suitable for gravity fed systems.

PREPOR GF utilises a glass microfibre filter medium encased within an upstream polypropylene mesh and a downstream non-woven filter support material. PREPOR GF filter cartridges are dimensionally stable with no media migration. The pleat pack is supported by an inner polypropylene core and outer polypropylene cage, heat bonded to polypropylene end caps.

Features and Benefits

- Micron rating range • from 0.6 to 10 micron
- Wide range of end caps to • allow retrofitting of existing systems
- High filtration area •
- High capacity filter media giving microbial retention
- Heat bonded construction

PREPOR GF Filter Cartridges

- liquid filters
- glass microfibre



Note: PREPOR is a registered trademark of Parker domnick hunter

Differential Pressure (psi



Performance Characteristics

PREPOR GF Filter Cartridges

Specifications

Materials of Construction

- Filtration Membrane:
- Upstream Support:
- Downstream Support:
- Inner Support Core:
- Outer Protection Cage:
- End Caps: End Cap Insert:
 - Polypropylene 316L Stainless Steel
- Standard o-rings/gaskets: Silicone / EPDM
- Capsule Body:
- Silicone
 - Polypropylene

Polycarbonate

Polypropylene

Glass Microfibre

Polypropylene

Polypropylene

Polypropylene

Polypropylene

- Capsule Vent Seals:
- Filling Bell:
- Syringe Filter Body:

Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177, EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.

Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits.

Temp	erature	Max. Forward dP		
°C	°F	(bar)	(psi)	
20	68	5.0	72.5	
40	104	4.0	58.0	
60	140	3.0	43.5	
80	176	2.0	29.0	
90	194	1.0	14.5	
>100 (steam)	>212 (steam)	0.3	4.0	

Capsules may be operated up to a temperature of 40 °C (104 °F) at line pressures up to 5.0 barg (72.51 psig) for liquids and 4.0 barg (58.01 psig) in air / gas.

Effective Filtration Area (EFA)

10" (250 mm) $0.6 \text{ m}^2 [6.3 \text{ ft}^2]$

Cleaning and Sterilisation

PREPOR GF cartridges can be repeatedly steam sterilised in situ or autoclaved at up to 121 °C (249.8 °F). They can be sanitised with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals. Capsules can be repeatedly autoclaved up to 121 °C (249.8 °F).

For detailed operational procedures and advice on cleaning and sterilisation, please contact the Technical Support Group through your usual Parker domnick hunter contact.

Retention Characteristics

The retention characteristics of PREPOR GF have been determined through controlled laboratory tests challenging with a standard aqueous suspension of ACFTD (AC Fine Test Dust) using on-line laser particle counters.

Efficiency > Beta Ratio	Micr 99.99% 10000	on Ratir 99.98% 5000	ng at Var 99.90% 1000	ious Effic 99% 100	iencies 95% 20	90% 10
0.6 & 0.8 µm	0.60	0.50	0.46	0.33	0.25	0.22
1.0 & 1.5 µm	1.0	0.80	0.60	0.52	0.42	0.35
2.0 µm	1.5	1.2	0.93	0.77	0.63	0.47
5.0 µm	2.0	1.6	1.5	1.2	0.82	0.73
7.0 µm	5.0	4.3	3.6	2.9	2.3	2.0
10.0 µm	10.0	9.2	7.9	5.9	4.4	4.0

Recommended Rinse Volume

Prior to use - 20 litres per 10" (250 mm) filter cartridge.

Pharmaceutical Validation

A full validation guide is available upon request from Laboratory Services Group (LSG).

