

ALpHA®

MF Capsule

Description

The ALpHA® MF grade pleated polypropylene meltblown filter capsule is manufactured using high quality components that are nontoxic and biologically inert.

Materials of Construction

All components of the ALpHA® filter capsule are either animal component free or in compliance with EMEA/410/01 Rev. 3 (EDQM 5.2.8 07/2011:50208), and US Code of Federal Regulations 9 CFR 94.18 and 21 CFR 189.5. These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

Media:	Polypropylene	CFR Title 21, 177.1520
Upstream support:	Polypropylene	CFR Title 21, 177.1520
Downstream support:	Polypropylene	CFR Title 21, 177.1520
Outer guard:	Polypropylene	CFR Title 21, 177.1520
Core:	Polypropylene	CFR Title 21, 177.1520
End caps:	Polypropylene	CFR Title 21, 177.1520
Capsule housing:	Polypropylene	CFR Title 21, 177.1520
Sealing method:	Thermal bonding	

Pore Size Ratings (Absolute) 0.45, 0.6, 0.8, 1.2, 2.4, 5, 7, 10, 20, 30, 40, 70 microns

Operating Characteristics

Operating temperature range: 32 °F to 100 °F (0 °C to 38 °C)
Maximum temperature rating: 160 °F @ 35 psig (71 °C @ 2.4 bar)
Maximum operating pressure (liquid service): 75 psig @ 100 °F (5.2 bar @ 38 °C)
Maximum operating pressure (gas service): 50 psig @ 100 °F (3.4 bar @ 38 °C)

Sterilization

Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles.
Capsules must not be steamed in place (SIP).

Biological Safety

ALpHA® filters meet the requirements as specified in the current USP Class VI plastics, physicochemical, oxidizable substances, and cytotoxicity tests. Bacterial endotoxin levels in aqueous extracts of ALpHA® filters are less than 0.25 EU/mL, as determined using the *Limulus* amoebocyte lysate (LAL) test. No binders, adhesives or surfactants are used in the construction of ALpHA® filters. Filters comply with Commission Regulation (EU) No 10/2011.

Quality Assurance

ALpHA® filters comply with the Food and Drug Administration Code of Federal Regulations, Title 21, Parts 210 and 211. Product is manufactured and packaged in a cleanroom facility that, through voluntary compliance, meets or exceeds FDA Good Manufacturing Practice Standards. To ensure product reliability, Meissner's Quality Assurance staff continually audits the manufacturing process for conformance to its Quality Management System. Each ALpHA® filter is clearly marked with filter type, lot number and serial number.

Ordering Guide

C S 2 MF 0.6 22 4

Capsule Options	
Standard capsule	C
Opaque shell	O

Effective Filtration Area (nominal)	
2.0 ft ² (0.19 m ²)	L
1.0 ft ² (0.09 m ²)	S

Vent / Drain Ports	
0	No vent / drain port
1	One luer port with cap, outlet side
2	Standard; two luer ports with caps
4	Two sanitary valves with hose barbs
5	One sanitary valve with hose barb, outlet side

Housing Material Designator	
Standard polypropylene	(blank)
Animal component free (ACF) polypropylene	2

Inlet / Outlet Connections			
00	1" sanitary (TC) flange	44	1/4" MNPT
02	1" TC in; 3/8" hose barb out	55	3/8" FNPT
0C	1" TC in; 1/2" hose barb out	66	3/8" MNPT
CC	1/2" hose barb (rigid tubing)	77	3/4" sanitary (TC) flange
22	3/8" hose barb	88	3/4" hose barb
2B	3/8" hose barb w/filling-bell	99	1/2" hose barb (flexible tubing)

Product	Filter Grade	Retention Rating
ALpHA [®] polypropylene microfiber media	MF	0.45, 0.6, 0.8, 1.2, 2.4, 5, 7, 10, 20, 30, 40, 70

Additional information about ALpHA[®] filter products is available in the Green Docs document which is viewable at <https://www.meissner.com/downloads/alpha-gd008-2.2.pdf>

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