

ALTAFLUOR® 450 UHP PFA (high purity perfluoroalkoxy) is commonly chosen for applications involving extreme chemical resistance combined with high purity requirements. Although HP PFA is available in a variety of resin grades, ALTAFLUOR® 450 HP PFA tubing is made from a high molecular weight, high purity resin that provides excellent chemical resistance, highest purity levels (extractable data available upon request) and smooth surface finish. ALTAFLUOR® 450 UHP PFA tubing is ideal for use with flare or conventional fittings.

ALTAFLUOR® 450 FEATURES

- Exclusive use of Dyneon 6502UHP PFA – a Semi-57 & C-90 approved resin
- 100% Virgin High Performance Grade resin used to resist stress cracking
- Chemically inert to nearly all industrial chemicals & solvents
- High thermal stability
- Low permeation
- Translucent
- Smooth surface finish resulting in less area of particle entrapment
- Moisture absorption nearly zero
- FDA compliant for food contact
- Non-Flammable
- Suitable for use with flare or conventional fittings
- Also available in pipe, coiled hose and convoluted constructions

APPLICATIONS

- Semiconductor
- Chemical process
- Heat Exchangers
- Laboratory applications
- Flow Monitoring
- Pharmaceutical

SPECIFICATIONS

General: Meets or exceeds the requirements listed in ASTM D 6867-03

Temperature: -320 °F to 500 °F

Flammability: Resin is UL 94 V0 rated. HP PFA resists combustion and does not promote flame spread.

FDA: HP PFA is approved for use in food contact applications in compliance with FDA regulation: 21 CFR 177.1550

ALTAFLUOR® 450 HP PFA - TUBING

PART NUMBER	ID	OD	+/-	WALL	+/-
450-0125-030-OC	1/16	1/8	.004	0.030	.003
450-0250-030-OC	3/16	1/4	.004	0.030	.003
450-0250-040-OC	.170	1/4	.004	0.040	.003
450-0250-047-OC	.156	1/4	.004	0.047	.003
450-0250-062-OC	1/8	1/4	.005	0.062	.003
450-0375-062-OC	1/4	3/8	.005	0.062	.003
450-0500-062-OC	3/8	1/2	.005	0.062	.003
450-0750-062-OC	5/8	3/4	.005	0.062	.003
450-1000-062-OC	7/8	1	.005	0.062	.003
450-1250-075-OC	1.100	1.250	.008	0.075	.003
METRIC SIZES	ID	OD	+/-	WALL	+/-
450-0157-040-OC	2mm	4mm	.005	1mm	.003
	.078	.157	.005	0.040	.003
450-0236-040-OC	4mm	6mm	.005	1mm	.003
	.157	.236	.005	0.040	.003
450-0315-040-OC	6mm	8mm	.005	1mm	.003
	.236	.315	.005	0.040	.003
450-0394-040-OC	8mm	10mm	.005	1mm	.003
	.315	.394	.005	0.040	.003
450-0472-040-OC	10mm	12mm	.005	1mm	.003
	.394	.472	.005	0.040	.003

Additional sizes up to 4" OD available upon request. Please contact Altaflo office for details.

Available in natural color only. For pigmented items, see ALTAFLUOR® 400 series.

Tested and meets requirements of Semi F-57 and Semi F-90. Test results available upon request.



P: 973-300-3344

F: 973-300-3345

E: sales@altaflo.com

A: 23 Wilson Drive, Sparta, NJ 07871

ALTAFLUOR® is a registered trademark of Altaflo LLC

TEFLON™ is a brand of Chemours

NEOFLON® is a registered trademark of Daikin

KYNAR® and KYNAR FLEX® are registered trademarks of Arkema Inc.

Due to the nature of applications involving the use of fluoropolymers, we suggest that all customers test product within the conditions specific to their application prior to use.

ALTAFLUOR® 450 PFA - BEND RADIUS AND WORKING PRESSURE CHART

PART NUMBER	OD	WALL	ID	BEND RADIUS	WORKING PRESSURE @ 73°F
450-0125-030-OC	0.125	0.030	0.062	1/2"	451
450-0250-030-OC	0.250	0.030	0.188	1"	226
450-0250-040-OC	0.250	0.040	0.170	1"	301
450-0250-047-OC	0.250	0.047	0.157	3/4"	353
450-0250-062-OC	0.250	0.062	0.125	1/2"	466
450-0375-062-OC	0.375	0.062	0.250	1"	311
450-0500-062-OC	0.500	0.062	0.375	2"	233
450-0750-062-OC	0.750	0.062	0.625	6"	155
450-1000-062-OC	1.000	0.062	0.875	22"	117
450-1250-075-OC	1.250	0.075	1.100	25"	75
METRIC SIZES	OD	WALL	ID	BEND RADIUS	WORKING PRESSURE @ 73°F
450-0236-040-OC	0.236	0.040	0.157	1-3/4"	313
	6mm	1mm	4mm		
450-0315-040-OC	0.315	0.040	0.236	2-1/2"	235
	8mm	1mm	6mm		
450-0394-040-OC	0.394	0.040	0.315	2-3/4"	188
	10mm	1mm	8mm		

The above information is based on tests performed at 73° F and can vary in individual applications based on parameters such as temperature, chemical concentration, pressure, etc. Please consult factory for details. For an estimate on burst pressure at ambient temperature we consider a 3:1 ratio when exposure temperature is 73° F. However Altaflo does not recommend exceeding the suggested Working Pressure listed. Additional sizes up to 2" are available.

Available in natural color only. For pigmented items, see ALTAFLUOR® 400 series.

ALTAFLUOR® 450 SERIES PFA - PHYSICAL PROPERTIES

PHYSICAL PROPERTY	ASTM TEST METHOD	UNITS	VALUES
Upper Service Temp.			500° F
Specific Gravity	D 792		2.15
Tensile Strength	D 1708	PSI	4500
Elongation	D 638	%	400
Flex Modulus	D 790	PSI	90,000
MIT Flex Life	D 2176		1,750,000
Hardness	D 2240	Shore D	60

The above information is based on tests performed at 73° F and can vary in individual applications based on parameters such as temperature, chemical concentration, pressure, etc. Please consult factory for details. NOTE: The values represented above are based on the use of 100% virgin grade high performance - low melt flow PFA resin as used in the production of ALTAFLUOR® 450 Series Tubing. When comparing data it is critical that performance values are listed for the grade of resin used.



P: 973-300-3344
 F: 973-300-3345
 E: sales@altaflo.com
 A: 23 Wilson Drive, Sparta, NJ 07871

ALTAFLUOR® is a registered trademark of Altaflo LLC
 TEFLON™ is a brand of Chemours
 NEOFLO® is a registered trademark of Daikin
 KYNAR® and KYNAR FLEX® are registered trademarks of Arkema Inc.

ALTAFLUOR® 450 UHP PFA - TUBING SCHEDULE 40 PIPE

PART NUMBER	NOMINAL SIZE	ACTUAL SIZE	WALL	STOCK LENGTH
450-0540-088-0C	1/4"	.540" ± .010	.088"±.020,-0	10ft
450-0840-109-0C	1/2"	.840" ± .010	.109"±.020,-0	10ft
450-1050-113-0C	3/4"	1.050" ± .010	.113"±.020,-0	10ft
450-1315-133-0C	1"	1.315" ± .010	.133"±.020,-0	10ft
450-1660-140-0C	1-1/4"	1.660" ± .015	.140"±.020,-0	10ft
450-1900-145-0C	1-1/2"	1.900" ± .015	.145"±.020,-0	10ft
450-2375-154-0C	2"	2.374" ± .015	.154"±.020,-0	10ft

Additional sizes and Schedule 80 Pipe available upon request. Minimum order requirements for non-catalog items will apply. 10 ft minimum order requirement - can be cut into shorter lengths for shipment. All 450 UHP PFA in stock.

ALTAFLUOR® 450 UHP PFA - STANDARD CONVOLUTED CONSTRUCTION

PART NUMBER	NOMINAL OD SIZE	ID MIN	ID MAX	OD MAX	NOMINAL WALL	CONVOLUTIONS PER INCH
45C-0375-020-0C*	3/8	0.251	0.275	0.375	0.020	6
45C-0500-023-0C*	1/2	0.364	0.375	0.500	0.023	6
45C-0625-025-0C*	5/8	0.485	0.500	0.625	0.025	5.5
45C-0750-025-0C*	3/4	0.608	0.625	0.750	0.025	5
45C-0875-025-0C*	7/8	0.730	0.750	0.875	0.025	4
45C-1000-025-0C*	1	0.860	0.875	1.000	0.025	3.5

*Custom item - please consult factory for lead time and minimum order requirements. Available in natural color only. For pigmented items, see ALTAFLUOR® 400 series.

ALTAFLUOR® 450 UHP PFA - ULTRA FLEX CONVOLUTED CONSTRUCTION

PART NUMBER	NOMINAL OD SIZE	ID MIN	ID MAX	OD MAX	NOMINAL WALL	CONVOLUTIONS PER INCH
45U-0375-020-0C*	3/8	0.251	0.275	0.375	0.020	9
45U-0500-023-0C*	1/2	0.364	0.375	0.500	0.023	9
45U-0625-025-0C*	5/8	0.485	0.500	0.625	0.025	9
45U-0750-025-0C*	3/4	0.608	0.625	0.750	0.025	8
45U-0875-025-0C*	7/8	0.730	0.750	0.875	0.025	8
45U-1000-025-0C*	1	0.860	0.875	1.000	0.025	8

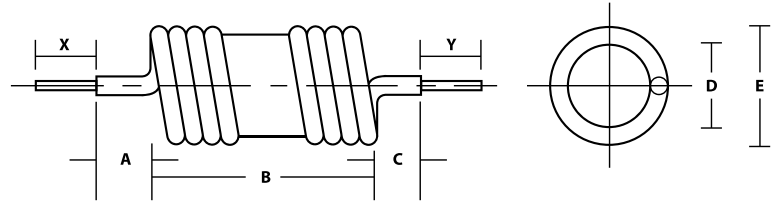
*Custom item - please consult factory for lead time and minimum order requirements. Available in natural color only. For pigmented items, see ALTAFLUOR® 400 series.

ALTAFLUOR® 450 HP - PIPE

PART NUMBER	NOMINAL SIZE	ACTUAL SIZE	WALL	STOCK LENGTH
Schedule 40 Pipe				
450-0405-068-0C	1/8"	.405" ± .010	.068" +.020,-0	10 FT
450-0540-088-0C	1/4"	.540" ± .010	.088" +.020,-0	10 FT
450-0840-109-0C	1/2"	.840" ± .010	.109" +.020,-0	10 FT
450-1050-113-0C	3/4"	1.050" ± .010	.113" +.020,-0	10 FT
450-1315-133-0C	1"	1.315" ± .010	.133" +.020,-0	10 FT
450-1900-145-0C†	1-1/2"	1.900" ± .015	.145" +.020,-0	10 FT
450-2375-154-0C	2"	2.375" ±.015	.154" +.020,-0	10 FT

† Custom item - please consult factory for lead time and minimum order requirements. Able to be produced in long continuous lengths

ALTAFLUOR® 450 UHP PFA - COILED HOSE



Custom item - see Coiled Hose Order Form for ordering information. Please consult factory for additional details.



P: 973-300-3344
 F: 973-300-3345
 E: sales@altaflo.com
 A: 23 Wilson Drive, Sparta, NJ 07871

ALTAFLUOR® is a registered trademark of Altaflo LLC
 TEFLON™ is a brand of Chemours
 NEOFLO® is a registered trademark of Daikin
 KYNAR® and KYNAR FLEX® are registered trademarks of Arkema Inc.