



Ultra High Purity Perflouroalkoxy Tubing

PFA Tubing has been specifically developed for the most extreme chemical and ultra high purity service conditions. It is manufactured from 100% virgin ultra high molecular weight PFA (ultra high purity perflouroalkoxy). The result is superior micro porosity characteristics and externally smooth surface finishes.

The product has excellent flexibility compared to other grades of PFA and is ideal for use with flaring tools and compression fittings.

Specifications

- Meets or Exceeds ASTM D 6867-03
- Temperature: -350°F to 500°F
- Flammability: UL 94 VO Rated (Resists combustion and spread of flames)
- U.S. Pharmacopoeia Class VI Certification
- Cytotoxicity Criteria
- In compliance with CFR Title 21 Section 177.1550
- Traceability: Lot and Batch
- Certification: Lot and Batch
- Current Good Manufacturing Practices (CGMP)
- Animal Derived Ingredient Free

Sterilization

- Ethylene oxide
- Autoclave

Benefits

- 100% virgin-grade high-performace resin
- Chemically inert to most industrial chemicals and solvents
- Excellent UV transmission (Optically Clear)
- Low permeability
- Higher thermal stability than FEP
- FDA compliant for food contact
- Non flammable
- Superior electrical insulation
- Suitable for use with flare or conventional compression fitting
- Non-stick

Applications

- UHP Chemical Process
- Laboratory Applications
- Pharmaceuticals
- Semiconductor
- Flow monitoring
- Emissions monitoring
- Food Processing
- Electrical Insulation
- Heat Exchangers
- Automotive

Sizing Chart

ID	OD	Wall	Bend Radius	Max WP @ 72°F
1/16"	1/8"	1/32"	1/2"	449 PSI
3/32"	5/32"	1/32"	1/2"	360 PSI
1/8"	3/16"	1/32"	3/4"	299 PSI
3/16"	1.4"	1/32"	1.00"	225 PSI
1/4"	5/16"	1/32"	1-3/4"	179 PSI
5/16"	3/8"	1/32"	2-1/2"	150 PSI
3/8"	7/16"	1/32"	3-1/2"	128 PSI
7/16"	1/2"	1/32"	4.00"	112 PSI
1/2"	9/16"	1/32"	Contact Facory	Contact Factory
9/16"	5/8"	1/32"	6 -1/2"	90 PSI
5/8"	11/16"	1/32"	Contact Factory	Contact Factory
11/16"	3/4"	1/32"	8.00"	75 PSI
1/16"	3/16"	1/16"	1/2"	617 PSI
1/8"	1/4"	1/16"	1/2"'	454 PSI
3/16"	5/16"	1/16"	1.00"	371 PSI
1/4"	3/8"	1/16"	1.00"	310 PSI
5/16"	7/16"	1/16"	2.00"	265 PSI
3/8"	1/2"	1/16"	2.00"	232 PSI
1/2"	5/8"	1/16"	3.00"	186 PSI
5/8"	3/4"	1/16"	6.00"	155 PSI
3/4"	7/8"	1/16"	12.00"	133 PSI
7/8"	1.00"	1/16"	22.00"	116 PSI
1.00"	1-1/8"	1/16"	Contact Factory	105 PSI
1-1/8"	1-1/4"	1/16"	Contact Factory	84 PSI
1-1/4"	1-3/8"	1/16"	Contact Factory	Contact Factory

Special Size Tubing

ID	OD	Wall	Bend Radius	Max WP @ 72°F
.170"	.250"	.040"	1.00"	300 PSI
.156"	.250"	.047"	3/4"	352 PSI
.250"	.350"	.050"	Contact Factory	Contact Factory
.275"	.375"	.050"	Contact Factory	Contact Factory
.750"	.830"	.040"	Contact Factory	Contact Factory
1.00	1.10"	.050"	Contact Factory	Contact Factory

FEP Metric Sizes

ID	OD	Wall	Bend Radius	Max WP @ 72°F
1mm	3mm	1mm	Contact Factory	Contact Factory
2mm	4mm	1mm	1-1/2"	468 PSI
3mm	5mm	1mm	Contact Factory	Contact Factory
4mm	6mm	1mm	1-3/4"	312 PSI
5mm	7mm	1mm	Contact Factory	Contact Factory
6mm	8mm	1mm	2-1/2'	234 PSI
6mm	9mm	1.5mm	Contact Factory	Contact Factory
7mm	9mm	1mm	Contact Factory	Contact Factory
8mm	10mm	1mm	2-3/4"	187 PSI
9mm	11mm	1mm	Contact Factory	Contact Factory
10mm	12mm	1mm	4.00"	156 PSI
11mm	13mm	1mm	Contact Factory	Contact Factory
12mm	14mm	1mm	Contact Factory	Contact Factory
14mm	16mm	1mm	Contact Factory	Contact Factory

Material Properties

Property	Test Method@73°F (22,8°C)	Unit	Value
Upper Service Temperature		°F (°C)	500 (260)
Specific Gravity	ASTM D792		2.15
Tensile Strength	ASTM D1708	psi (Mpa)	4,200 (28.9)
Elongation	ASTM D638	%	400
Flex Modulus	ASTM D790	psi (Mpa)	90,000 (620)
MIT Flex Life	ASTM D2176		500,000+
Durometer Hardness	ASTM D2240	Shore D	60

This information provided by CLARIPURE® is deemed to be accurate; however, it should be used only as a general reference to aid in product selection. Please note: a material's properties may be affected greatly by temperature, operating pressure, concentration, and the presence of other chemicals. Ultimately, the consumer must determine the compatibility of any material based on tests done under their particular process conditions.

