



ETFE
Tubing

Key advantages

- Mechanically strong
- Excellent impact strength
- Good resistance to stress cracking
- ETFE is virtually unaffected by oxygen, ozone and UV light

Dimensions

Optinova produces metric, imperial and AWG sizes. Special dimensions can be made upon request. Custom production length is available but fixed length can be supplied upon request.

Standard tolerances

OD mm	Tol mm
>1.99	+/- 0.07
2.00-3.99	+/- 0.08
4.00-7.99	+/- 0.10
8.00-9.99	+/- 0.12
10.00-11.99	+/- 0.15
12.00-15.99	+/- 0.20
16.00-17.99	+/- 0.25
18.00-19.99	+/- 0.30
20.00-23.99	+/- 0.35
24.00-29.99	+/- 0.40

etc.

Standard tolerances

Wall mm	Tol mm
>0.30	+/- 0.05
0.31-0.70	+/- 0.08
0.71-1.00	+/- 0.10
1.01-1.30	+/- 0.12
1.31-1.60	+/- 0.15
1.61-2.00	+/- 0.20
2.01-2.50	+/- 0.25
2.51-3.00	+/- 0.30
3.01-3.50	+/- 0.35
3.51-4.00	+/- 0.40

etc.

ETFE	Property	Specification	Unit	
General	Continuous service temperature	Maximum	°C (°F)	150 (302)
	Chemical resistance		-	Very good
	Specific gravity	D792	-	1.73
	Transparency	-	-	Good
	Sterialization			Eto, Steam, Radiation
Environmental	Water absorption	D570	%	< 0.03
	Weather resistance	-	-	Excellent
	Oxygene index	D2863	%	> 30
	Flammability	UL 94	-	V-0
Thermal	Melting point		°C (°F)	260 (500)
	Thermal conductivity	C177	BTU/(h.ft.°F)	1.6
	Deflection temperature 66 psi (0.5 MPa)	D648	°C (°F)	104 (220)
	Deflection temperature 264 psi (1.8 MPa)	D648	°C (°F)	71 (160)
Mechanical	Tensile strength	D1708, D638	psi MPa	6 500 44.8
	Elongation	D1708, D638	%	230-300
	Compressive strength	D695	psi MPa	7 000 48.3
	Impact strength	D256 (+23°C)	Ft-Lb/in	No Break
	Flexural Modulus	D790 (+23°C)	psi MPa	200 000 1 379
	Tensile Modulus	D638	psi MPa	120 000 827.4
	Hardness	D2240	-	D-75
	Coefficient of friction	-	-	0.23
	Electrical	Dielectric constant	D150 (103 Hz) D150 (106 Hz)	- -
Dielectric dissipation factor		D150 (103 Hz) D150 (106 Hz)	- -	0.0008 0.0005
Dielectric strength (short term) 10 mils film		D149	Volt/mil	2 000
Volume resistivity		D257	Ohm • cm	> 10 ¹⁷