



ETFE TUBING

Key properties / advantages of ETFE tubing

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

	PROPERTY	SPECIFICATION	UNIT		
General	Continuous service temperature	Maximum	°C	150	
			°F	302	
	Chemical resistance		–	Excellent	
	Specific gravity	D 792	–	1.73	
Electrical	Dielectric constant	D 150 at 10 ³ Hz	–	2.6	
		D 150 at 10 ⁶ Hz	–	2.6	
	Dielectric dissipation factor	D 150 at 10 ³ Hz	–	0.0008	
		D 150 at 10 ⁶ Hz	–	0.0005	
	Dielectric strength (short term) 10 mils film	D 149	Volt/mil	2 000	
Volume resistivity	D 257	Ohm • cm	>10 ¹⁶		
Enviromental	Water absorption	D 570	%	< 0.03	
	Weather resistance	–	–	Excellent	
	Oxygene index	D 2863	%	>30	
	Flammability	UL 94	–	V-0	
Mechanical	Tensile strength	D 1708, D 638	psi	6 500	
	Elongation	D 1708, D 638	%	200	
	Compressive strength	D 695	psi	7 000	
	Impact strength	D 256 at +23°C	Ft-Lb/in	No Break	
	Flexural Modulus	D 790 at +23°C	psi	200 000	
	Tensile Modulus	D 638	psi	120 000	
	Hardness	D 2240	–	D-75	
	Thermal	Melting point		° C	260
° F				500	
Thermal conductivity		C-177	BTU/hr/ft ² /°F.in	1.6	
Deflection temperature 66 psi 264 psi		D 648	° C		104
					71
Deflection temperature 66 psi 264 psi		D 648	° F		220
					160

Dimensions: Optinova produces metric, imperial and AWG sizes. Special dimensions can be made upon request. Random production length is standard but fix length and cut pieces 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.	