

Tefzel® ETFE (Ethylene-Tetrafluoroethylene)

ETFE is a modified copolymer of tetrafluoroethylene and ethylene. It is commonly referred to by DuPont's trade name of Tefzel®. It provides excellent resistance to attack by chemicals and solvents, which can cause rapid deterioration of other plastics. In addition to its chemical resistance, ETFE has excellent mechanical strength, stiffness, and abrasion resistance. It also has a low dielectric constant and uniform electrical properties.

Specifications:

DuPont Tefzel® meets ASTM D3159

Property	ASTM Test Method	Units	Tefzel® ETFE
Physical			
Specific Gravity	D792		1.70-1.78
Mechanical			
Tensile Strength	D1457 D1708 D638	psi	5,800-6,700
Elongation	D1457 D1708 D638	%	150-300
Flexural Modulus	D790	psi	145,000
Folding Endurance	D2176	(MIT) cycles	10-27 x 10 ³
Impact Strength	D256	ft-lb/in	No Break
Hardness, Shore D	D2240		63-72
Coefficient of Friction, Dynamic	D1894	<10 ft/min	0.23
Thermal			
Melting Point	D3418	°F	473-536
Upper Service Temperature (20,000h)	UL746B	°F	311
Flame Rating	UL94		V0
Limiting Oxygen Index	D2863	%	30-36
Heat of Combustion	D240	Btu/lb	5,900

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.