

Kel-F (CTFE)

Kel-F (PCTFE) Typical Properties		
ASTM or UL test	Property	PCTFE
PHYSICAL		
D792	Density (lb/in ³) (g/cm ³)	0.077 2.13
D570	Water Absorption, 24 hrs (%)	< 0.01
MECHANICAL		
D638	Tensile Strength (psi)	5,300
D638	Tensile Modulus (psi)	207,000
D638	Tensile Elongation at Break (%)	150
D790	Flexural Strength (psi)	8,500
D790	Flexural Modulus (psi)	180,000
D695	Compressive Strength (psi)	5,500
D695	Compressive Modulus (psi)	180,000
D785	Hardness, Shore D	D90
D256	IZOD Notched Impact (ft-lb/in)	5
THERMAL		
D696	Coefficient of Linear Thermal Expansion (x 10 ⁻⁵ in./in./°F)	7.0
D648	Heat Deflection Temp (°F / °C) at 264 psi	258 / 126
D3418	Melting Temp (°F / °C)	415 / 212
-	Max Operating Temp (°F / °C)	270 / 132
C177	Thermal Conductivity (BTU-in/ft ² -hr-°F) (x 10 ⁻⁴ cal/cm-sec-°C)	1.45 4.99
UL94	Flammability Rating	V-0
ELECTRICAL		
D149	Dielectric Strength (V/mil) short time, 1/8" thick	500
D150	Dielectric Constant at 1 MHz	-
D150	Dissipation Factor at 1 MHz	-
D257	Volume Resistivity (ohm-cm)at 50% RH	10 ¹⁸

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should not be used as the sole basis for design specifications or quality control. All values at 73°F (23°C) unless otherwise noted.