

PCTFE - Datasheet

ASTM or UL test	Properties	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