TYPICAL PROPERTIES of PEEK					
ASTM or UL test	**Property**	**Unfilled**	**30% Glass Fibers**	**30% Carbon Fibers**	**Bearing Grade**
PHYSICAL					
D792	Density (lb/in³) (g/cm³)	0.047 1.31	0.056 1.54	0.051 1.41	0.052 1.44
D570	Water Absorption, 24 hrs (%)	0.10	0.10	0.06	0.05
MECHANICAL					
D638	Tensile Strength (psi)	16,000	18,000	26,000	11,000
D638	Tensile Modulus (psi)	500,000	1,000,000	1,400,000	850,000
D638	Tensile Elongation at Break (%)	20	3	1	2
D790	Flexural Strength (psi)	25,000	28,000	38,000	27,500
D790	Flexural Modulus (psi)	600,000	1,000,000	1,700,000	1,100,000
D695	Compressive Strength (psi)	20,000	26,000	29,000	26,700
D695	Compressive Modulus (psi)	500,000	1,000,000	-	1,000,000
D785	Hardness, Rockwell	M100	M103	M104	M85
D256	IZOD Impact Notched (ft-lb/in)	1.0	1.4	1.5	0.7
THERMAL					
D696	Coefficient of Linear Thermal Expansion (x 10^{-5} in./in./°F)	2.6	1.2	1.0	1.7
D648	Heat Deflection Temp (°F / °C) at 264 psi	320 / 160	600 / 315	550 / 288	383 / 195
D3418	Melting Temp (°F / °C)	644 / 340	644 / 340	644 / 340	-
-	Max Operating Temp (°F / °C)	480 / 249	480 / 249	500 / 260	482 / 250
C177	Thermal Conductivity (BTU-in/ft²-hr-°F) (x 10^{-4} cal/cm-sec-°C)	1.75 6.03	2.98 10.3	6.4 22.0	1.7 5.9
UL94	Flammability Rating	V-0	V-0	V-0	V-0
ELECTRICAL					
D149	Dielectric Strength (V/mil) short time, 1/8" thick	480	500	32	-
D150	Dielectric Constant at 1 MHz	3.30	-	-	-
D150	Dissipation Factor at 1 MHz	0.003	-	-	-
D257	Volume Resistivity (ohm-cm) at 50% RH	4.9 x 10^{16}	5 x 10^{16}	10^{5}	10^{3}