

XP-181

Compression Molded DATASHEET

PPEK Compound: EWS filled and carbon fiber reinforced

Description	ASTM Test Method	Units	Typical Values
<i>Mechanical Properties</i>			
Tensile Strength	D-1708	psi	12,300
Tensile Elongation	D-1708	% @ break	1.1
Tensile Modulus	D-1708	psi	1,500,000
Flexural Strength	D-790	psi	19,200
Flexural Modulus	D-790	psi	1,400,000
Flexural Strain	D-790	%	1.8
Compressive Strength (Maximum)	D-695	psi	
Compressive Modulus	D-695	psi	
Izod Impact Strength (notched)	D-256	ft-lb/in	0.7
Shear Strength	D-732	psi	
Hardness	D-2240	Shore D	
Hardness	D-785	Rockwell (M)	104
<i>Thermal Properties</i>			
Heat Distortion Temperature	D-648	°F	
Coefficient of Linear Thermal Expansion	E-831	10 ⁻⁶ /°F	
Thermal Conductivity	C-177	BTU in/hr-ft ² -°F	
Continuous Use (Mechanical)	UL746B	°F	
Limiting oxygen Index	D2863	%O ₂	
Melt Point	DSC	°F	
<i>Electrical Properties</i>			
Dielectric Strength	D-149	KVcm	
Dielectric Constant	D-150	50Hz, 200°C	
Volume Resistivity	D-257	ohm-cm	
Surface Resistivity	D-257	ohm/sq	
<i>Physical Properties</i>			
Specific Gravity	D-792	gm/cm ³	1.9
Color			Black
Filler Content		%	
Water Absorption (RT 24h)	D-570	%	
Typical Level of Crystallinity		%	
<i>Other Properties</i>			
Static Coefficient of Friction	D-1894		
Kinetic Coefficient of Friction	D-1894		

Note: Listed properties should be interpreted as typical rather than minimum values. This technical information is presented in good faith and is based upon what is believed to be reliable laboratory data. We cannot guarantee the accuracy or completeness of this information. The responsibility for determining product suitability for any given application lies with the customer.