

TECATRON PPS CM XP82 BLACK

Compression Molded

DATASHEET

PPS Compound: Filled with 15% PTFE and 30% carbon fiber

Description	ASTM Test Method	Units	Typical Values
<i>Mechanical Properties</i>			
Tensile Strength	D-638	psi	5,800
Tensile Elongation	D-638	% @ break	1.1
Tensile Modulus	D-638	psi	1,200,000
Flexural Strength	D-790	psi	9,600
Flexural Modulus	D-790	psi	1,200,000
Flexural Strain	D-790	%	1.1
Compressive Strength (Maximum)	D-695	psi	14,500
Compressive Modulus	D-695	psi	230,000
Izod Impact Strength (Notched)	D-256	ft-lb/in	0.59
Shear Strength	D-732	psi	6,300
Shear Modulus	D-732	psi	150,000
Hardness	D-2240	Shore D	
<i>Thermal Properties</i>			
Heat Distortion Temperature	D-648	°F	371
Coeff. Of Thermal Expn: -58°F to 122°F	E-831	10 ⁻⁶ /°F	25.7
Coeff. Of Thermal Expn: 212°F to 392°F	E-831	10 ⁻⁶ /°F	83.5
Thermal Conductivity	E-1530	BTU in/hr-ft ² -°F	4.16
Continuous Use (Mechanical)	UL746B	°F	
Limiting oxygen Index	D2863	%O ₂	
Melt Point	DSC	°F	487
<i>Electrical Properties</i>			
Dielectric Strength	D-149	KVcm	
Dielectric Constant	D-150	50Hz, 200°C	
Volume Resistivity	D-257	10 ⁷ ohm-cm	30.5
Surface Resistivity	D-257	10 ⁷ ohm/sq	45.7
<i>Physical Properties</i>			
Specific Gravity	D-792	gm/cm ³	1.55
Color			Black
Filler Content		%	45
Water Absorption (RT 24h)	D-570	%	0.01
Typical Level of Crystallinity		%	
<i>Other Properties</i>			
Static Coefficient of Friction	D-1894		0.18
Kinetic Coefficient of Friction	D-1894		0.22

Against stainless steel #8 mirror finish

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.