



Typical Properties of

**PEEK**

Unfilled Polyetheretherketone

Process: Extruded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.31
Tensile Strength	D638	psi	16,000
Tensile Modulus	D638	psi	630,000
Elongation	D638	%	40
Flexural Strength	D790	psi	25,000
Flexural Modulus	D790	psi	600,000
Compressive Strength	D695	psi	20,000
Compressive Modulus	D695	psi	500,000
Hardness, Rockwell	D785	--	M100 (R126)
Hardness Durometer	--	--	D85
Izod Impact (notched)	D256	ft. lb of notch	1
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.4
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	$2.6 \times 10^{-5}$
Continuous Use Temperature	--	°F	480
Heat Deflection Temperature	D648	°F	320
Glass Transition Temperature	D3418	°F	290
Melting Point	D3418	°F	644
Thermal Conductivity	E1530-11	BTU in/hr ft <sup>2</sup> °F	1.75
Dielectric Strength	D149	Volts/mil	480
Surface Resistivity	EOS/ESD 511.11	ohm/square	$>10^{13}$
Flammability	UL94	--	V - 0
Water Absorption, 24 hrs.	D570	% by weight	0.1
Water Absorption, Saturation	D570	% by weight	0.5
Limiting PV (4:1 Safety Factor)	--	--	8,500
K-Factor	--	--	375
FDA Compliance	--	--	YES

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.  
All values at 73 F unless otherwise stated.