



Standard Bearing Grade PEEK

Compression Molded

Standard Bearing Grade PEEK is an industry standard, lubricated, reinforced bearing grade PEEK material. This 10/10/10 Carbon-fiber, Graphite, PTFE composite is popular for a number of medium PV dynamic applications. It is equivalent to Victrex 450FC30.

Physical Properties	ASTM Method	Typical Values
Specific Gravity	D792	1.44 gr/cm ³
Water Absorption (24hrs. @73.4°F)	D570	0.5 %
Color	N/A	Tan

Mechanical Properties		
Tensile Strength	DD638	9,500 psi
Tensile Elongation	D638	2.9 %
Flexural Strength	D790	20,000 psi
Flexural Modulus	D790	700,000 psi
Compressive Strength	D695	13,000 psi
Compressive Modulus	D695	
Impact Strength (Izod, notched)	D256	1 ft-lb/in
Hardness	Shore D	86

Tribological Properties		
Coefficient of Friction		
Static	D3702	
Dynamic	D3702	0.4
Wear Rate (PV: 20,000 psi-fpm)	D3702	µin/min

Thermal Properties		
Coefficient of Linear Thermal Expansion (78 to 400°F)	D696	30 10 ⁻⁶ /°F
Heat Deflection Temperature (@264 psi)	D648	325 °F
Glass Transition Temperature (T _g)	D3418	289 °F
Continuous Service Temperature (Max @ no load)		480 °F
Melting Point		644 °F

Electrical Properties	
Volume Resistivity	D257
Dielectric Strength	D149
Dielectric Constant	D150

Note: Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, based upon laboratory and real-world tests believed to be reliable and practical. However, the manufacturer Polymers cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine product suitability to any given application.

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