

**P5045** is a PTFE (polytetrafluoroethylene) lubricated PEEK (polyetheretherketone) composite. It offers excellent strength, chemical resistance, and impact resistance along with low coefficient of friction and excellent wear properties.

**Physical Properties**

	<b>ASTM Method</b>	<b>Typical Values</b>
Specific Gravity	D792	1.4 gr/cm <sup>3</sup>
Water Absorption (24 hrs. @73.4° F)	D570	0.15%
Color	N/A	Tan

**Mechanical Properties**

	<b>ASTM Method</b>	<b>Typical Values</b>
Tensile Strength	D1708	9500 psi
Tensile Elongation	D1708	7.0%
Flexural Strength	D790	17000 psi
Flexural Modulus	D790	480000 psi
Compressive Strength	D695	12800 psi
Compressive Modulus	D695	425000 psi
Impact Strength (Izod, notched)	D256	0.8 ft-lb/in
Hardness	Shore D	85

**Tribological Properties**

	<b>ASTM Method</b>	<b>Typical Values</b>
Coefficient of Friction - Static	D3702	0.26

**Thermal Properties**

	<b>ASTM Method</b>	<b>Typical Values</b>
Coefficient of Linear Thermal Expansion (78-400° F)	D696	45 10 <sup>-6</sup> /° F
Heat Deflection Temperature (@264 psi)	D648	300° F
Glass Transition Temperature (T <sub>g</sub> )	D3418	289° F
Continuous Service Temperature (Max @ no load)		480° F
Melting Point		644 ° F

**Electrical Properties**

	<b>ASTM Method</b>	<b>Typical Values</b>
	D257	10*16 ohm-cm