



**PEEK 5035** is a proprietary lubricated PEEK (polyetheretherketone) material. This material is designed for wear rings, rider bands and piston rings in reciprocating compressors for use in lubricated or non-lubricated conditions.

<i>Physical Properties</i>	<i>ASTM Method</i>	<i>Typical Values</i>
Specific Gravity	D792	1.41 gr/cm <sup>3</sup>
Water Absorption (24hrs. @73.4 °F)	D570	0.15 %
Color	N/A	Black

<i>Mechanical Properties</i>		
Tensile Strength	D638	11,000 psi
Tensile Elongation	D638	3.6 %
Flexural Strength	D790	21,000 psi
Flexural Modulus	D790	800,000 psi
Compressive Strength (5% strain)	D695	18,100 psi
Compressive Modulus	D695	500,000 psi
Impact Strength (Izod, notched)	D256	0.8 ft-lb/in
Hardness	Shore D	86

<i>Tribological Properties</i>		
Coefficient of Friction		
Static	D3702	0.35
Dynamic	D3702	0.29
Wear Rate (PV: 20,000 psi-fpm)	D3702	5.5 µin/min

<i>Thermal Properties</i>		
Coefficient of Linear Thermal Expansion (78 to 400 °F)	D696	37 10 <sup>-6</sup> /°F
Heat Deflection Temperature (@264 psi)	D648	530 °F
Glass Transition Temperature (Tg)	D3418	289 °F
Continuous Service Temperature (Max @ no load)		480 °F
Melting Point		644 °F