

## Technical Data Sheet PEI 4001

ProPolymers PEI 4001 is a polyetherimide resin designed for wear resistance and reduced friction. It offers a superior combination of mechanical, electrical, and thermal properties. It provides outstanding processability and good chemical resistance.

<b>Mechanical</b>	ASTM	English	Metric
Tensile Strength at Yield	D 638	14,000 psi.	95 Mpa
Elongation at Fail	D 638	8.0%	8.0%
Elongation at Yield	D 638	NA	NA
Flexural Modulus	D 790	450,000 psi.	3,000 Mpa
Flexural Strength	D 790	16,500 psi.	125 Mpa
Izod Impact Strength, Notched	D 256	1.2 ft-lb/in	10 kJ/m <sup>2</sup>
Izod Impact Strength, Unnotched	D 256	10.0 ft-lb/in	50 kJ/m <sup>2</sup>
<b>Thermal</b>			
Vicat Softening Temp	D1525	406 F	208 C
Deflection Temperature@ 66psi	D 648	392 F	200 C
Deflection Temperature @ 264psi	D 648	383 F	195 C
Coefficient of Thermal Expansion	D 696	2.0X10 <sup>-3</sup> %/F	4.0X10 <sup>-3</sup> %/C
<b>Misc.</b>			
Specific Gravity	D 792	1.33	1.33
Water Absorption (24hr.)	D 570	0.16%	0.16%
Hardness, Rockwell M		110	110
Melt Flow Rate, 337C/6.6 kgf	D 1238	9.9 g/10 min.	9.9 g/10 min.
Mold Shrinkage, flow, 125-180 mil	D 955	5-7 in/in E-3	5-7 in/in E-3
Mold Shrinkage, xflow, 125-180 mil	D 955	5-7 in/in E-3	5-7 in/in E-3

The data listed above are typical properties, and as such are dependent on processing conditions. No warranties, expressed or implied, including patent warranties, or warranties of merchantability or fitness for use, are made with respect to the product information.

