

## TECHNICAL PROPERTIES OF ZL™ 1400 T (Bearing Grade PET)

Property		Units	Test Method ASTM	Value
<b>MECHANICAL PROPERTIES</b>				
Specific Gravity		gm/cm <sup>3</sup>	D-792	1.44
Tensile Strength	73 °F	psi	D-638	10,900
Tensile Modulus	73 °F	psi	D-638	360,000
Elongation, Break	73 °F	%	D-638	5
Flexural Strength	73 °F	psi	D-790	14,000
Flexural Modulus	73 °F	psi	D-790	360,000
Compressive Strength	73 °F	psi	D-695	15,000
Compressive Modulus		psi	D-695	400,000
Impact Strength, Notched	73 °F	ft-lbs/in	D-256	0.8
Hardness, Rockwell		R	D-785	R117 (M94)
Hardness, Durometer, Shore D		D	2240	-
Shear Strength		psi	D-732	8,500
Coefficient of Friction, against steel		-	-	0.19
<b>THERMAL PROPERTIES</b>				
Deflection Temperature	66 psi	°F	D-648	-
	264 psi	°F	D-648	180
Maximum Temperature - Long Term		°F	-	210
Maximum Temperature - Short Term		°F	-	-
Melting Point		°F		491
Coefficient of Linear Thermal Expansion		in/in/°F	D-696	4.5 x 10 <sup>-5</sup>
Thermal Conductivity		Btu-in/hr-ft <sup>2</sup> -°F	C-177	1.9
<b>ELECTRICAL PROPERTIES</b>				
Dielectric Strength		V/mil	D-149	-
Dielectric Constant	1 kHz	-	D-150	-
Dissipation Factor	1 kHz		D-150	-
Flammability			UL 94	HB
Volume Resistivity	73 °F	Ω.cm	D-257	-
<b>WATER ABSORPTION RATES</b>				
Water Absorption at 73 °F	24 hours	%	D-570	0.06
	Saturation	%	D-570	0.47

All statements, technical information and recommendations contained in this brochure are presented in good faith, but all information is given without warranty and liability. The reader is cautioned, however that ZL Engineering Plastics cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of ZL™ products in any given application.