

TECHNICAL PROPERTIES OF ZL™ 900 BLK (Acetal Copolymer, Black)

Property		Units	Test Method ASTM	Value
MECHANICAL PROPERTIES				
Specific Gravity		gm/cm ³	D-792	1.41
Tensile Strength	73 °F	psi	D-638	8,800
Tensile Modulus	73 °F	psi	D-638	400,000
Elongation, Break	73 °F	%	D-638	55
Flexural Strength	73 °F	psi	D-790	13,000
Flexural Modulus	73 °F	psi	D-790	400,000
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	1.3
Hardness, Rockwell		R	D-785	R120 (M80)
Hardness, Durometer, Shore D		D	2240	D85
Shear Strength		psi	D-732	8,000
Coefficient of Friction, against steel		-	-	0.15
THERMAL PROPERTIES				
Deflection Temperature	66 psi	°F	D-648	316
	264 psi	°F	D-648	205
Maximum Temperature - Long Term		°F	-	180
Maximum Temperature - Short Term		°F	-	-
Melting Point		°F		355
Coefficient of Linear Thermal Expansion		in/in/°F	D-696	5.4 x 10 ⁻⁵
Thermal Conductivity		Btu-in/hr-ft ² -°F	C-177	1.6
ELECTRICAL PROPERTIES				
Dielectric Strength		V/mil	D-149	2,100
Dielectric Constant	1 kHz	-	D-150	3.7
Dissipation Factor	1 kHz		D-150	-
Flammability			UL 94	HB
Volume Resistivity	73 °F	Ω.cm	D-257	10 ¹⁵
WATER ABSORPTION RATES				
Water Absorption at 73 °F	24 hours	%	D-570	0.22
	Saturation	%	D-570	0.9

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