



# POLYMER INDUSTRIES

## PC

### TYPICAL PROPERTIES

Property	Test Method	Units	NATURAL and BLACK Unfilled Polycarbonate	PC Rg-20 20% Glass Fiber Reinforced PC
<b>Mechanical</b>				
Specific Gravity	ASTM-D792	---	1.20	1.35
Tensile Strength	ASTM-D638	psi	9,500	16,000
Tensile Elongation	ASTM-D638	%	110	5
Tensile Modulus	ASTM-D638	psi	330,000	860,000
Flexural Strength	ASTM-D790	psi	13,500	19,000
Flexural Modulus	ASTM-D790	psi	340,000	800,000
Compression Strength	ASTM-D695	psi	12,500	16,000
Izod Notched Impact	ASTM-D256	ft.- lb./in.	17.0	2.0
Rockwell Hardness	ASTM-D785	M or R scale	M70 (R118)	M91 (R122)
<b>Thermal</b>				
Coef. Of Linear Thermal Expansion	ASTM-D696	in./in./°F	$3.8 \times 10^{-5}$	$1.49 \times 10^{-5}$
Max Continuous Temp.	UL 746	°F	265	265
Heat Deflection Temp. @ 264 psi	ASTM-D3418	°F	270	295
<b>Electrical</b>				
Dielectric Strength-Short Term	ASTM-D149	volts/mil	380	490
Dielectric Constant @ 60 Hz	ASTM-D150	---	3.17	3.17
Dielectric Constant @ $10^6$ Hz	ASTM-D150	---	2.96	3.13
Dissipation Factor @ 60 Hz	ASTM-D150	---	0.0009	0.0009
Volume Resistivity	ASTM-D257	ohm-cm	$>10^{17}$	$>10^{17}$
<b>Miscellaneous</b>				
Water Absorption/24 hours	ASTM-D570	% weight	0.15	0.16
Water Absorption @ Saturation	ASTM-D570	% weight	0.35	0.29
Flammability	UL-94	---	HB	HB