



TYPICAL PROPERTIES of RYTON® 40% Glass-filled & RYTON® BEARING GRADE			
ASTM or UL test	Property	Ryton® 40% Glass-filled	Ryton® Bearing Grade
<b>PHYSICAL</b>			
D792	Density (lb/in <sup>3</sup> ) (g/cm <sup>3</sup> )	0.052 1.43	0.055 1.52
D570	Water Absorption, 24 hrs (%)	0.02	0.02
D570	Water Absorption, Saturation (%)	0.09	0.03
<b>MECHANICAL</b>			
D638	Tensile Strength (psi)	10,900	2,100
D638	Tensile Modulus (psi)	540,000	980,000
D638	Tensile Elongation at Break (%)	5	1
D790	Flexural Strength (psi)	10,500	25,000
D790	Flexural Modulus (psi)	535,000	820,000
D695	Compressive Strength (psi)	15,500	15,000
D695	Compressive Modulus (psi)	340,000	800,000
D785	Hardness, Rockwell	M84	M93/R126
D256	IZOD Impact Notched (ft-lb/in)	1.4	1.0
QTM55007 (* not ASTM)	Coefficient of Friction, Dry vs. Steel	0.2	0.2
QTM55007 (* not ASTM)	Limiting PV (psi-fpm)	8,750	8,500
QTM55010 (* not ASTM)	"K" Wear Factor, (x 10 <sup>-10</sup> in <sup>3</sup> -min/lb-ft-hr)	62	800
<b>THERMAL</b>			
D696	Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	3.3	1.7
D648	Heat Deflection Temp (°F / °C) at 264 psi	240 / 115	490 / 254
D3418	Melting Temp (°F / °C)	536 / 280	540 / 282
-	Max Operating Temp (°F / °C)	430 / 221	490 / 254
C177	Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F) (x 10 <sup>-4</sup> cal/cm-sec-°C)	2.1 7.2	2.2 7.6
UL94	Flammability Rating	V-0	V-0
<b>ELECTRICAL</b>			
D149	Dielectric Strength (V/mil) short time, 1/8" thick	500	-
D150	Dielectric Constant at 1 MHz	-	-
D150	Dissipation Factor at 1 MHz	-	-
D257	Surface Resistivity (ohm-square) at 50% RH	10 <sup>13</sup>	< 10 <sup>5</sup>

Data provided is for reference purposes only. Additional testing may be required for design specifications or quality control. All values at 73°F unless otherwise stated.

