

TYPICAL PROPERTIES OF TOYOLAC 100 322				
Typical Properties	Test Method	Test Conditions	SI Unit	Typical Value
<b>Physical</b>				
Specific Gravity	ASTM D792		-	1.04
Water Absorption	ASTM D570	23°C x 24 hours	%	0.3
Mould Shrinkage	ASTM D955		%	0.4 ~ 0.6
<b>Rheological</b>				
Melt Flow Rate	ISO 1133	220°C / 10 kg	g/10 min	15
<b>Mechanical</b>				
Tensile stress at yield	ASTM D638	at 5 mm/min	MPa	48
Tensile strain at break	ASTM D638	at 5 mm/min	%	48
Flexural Strength	ASTM D790	at 3 mm/min	MPa	74
Flexural Modulus	ASTM D790	at 3 mm/min	MPa	2280
Rockwell Hardness	ASTM D785	R scale	-	112
<b>Impact</b>				
Izod Impact Strength, notched	ASTM D256	12.7 x 62.5 x 12.7 <sup>t</sup> mm (23°C)	J/m	226
	ASTM D256	12.7 x 62.5 x 12.7 <sup>t</sup> mm (0°C)	J/m	177
	ASTM D256	12.7 x 62.5 x 12.7 <sup>t</sup> mm (-30°C)	J/m	118
Izod Impact Strength, notched	ASTM D256	12.7 x 62.5 x 3.2 <sup>t</sup> mm (23°C)	J/m	265
	ASTM D256	12.7 x 62.5 x 3.2 <sup>t</sup> mm (0°C)	J/m	196
	ASTM D256	12.7 x 62.5 x 3.2 <sup>t</sup> mm (-30°C)	J/m	137
<b>Thermal</b>				
HDT (Unannealed) 127 x 12.7 x 12.7 <sup>t</sup> mm	ASTM D648	1.82 MPa Loading, 18.56 kg/cm <sup>2</sup>	°C	93
HDT (Unannealed) 127 x 12.7 x 6.4 <sup>t</sup> mm	ASTM D648	1.82 MPa Loading, 18.56 kg/cm <sup>2</sup>	°C	88
Thermal Conductivity	ASTM C177		W/K.m	0.15
Coefficient of Linear Thermal Expansion	ASTM D696		mm/mm°C	7.4 x 10 <sup>-5</sup>
<b>Flammability</b>				
Flammability	UL 94		-	HB
<b>Electrical</b>				
Specific Surface Resistivity	ASTM D257	at 23°C	ohm	>10 <sup>16</sup>
Specific Volume Resistivity	ASTM D257	at 23°C	ohm.cm	>10 <sup>16</sup>
Dielectric Strength	ASTM D149	Short Time	KV/mm	23
Dielectric Constant	ASTM D150	1000 Hz	-	3.1
Power Factor	ASTM D150	1000 Hz	-	6.6 X 10 <sup>-3</sup>

