

ISOPLAST* 101 LGF60 NAT

Engineering Thermoplastic Polyurethane Resin

Properties	Test Method	English		S.I.	
		Values [†]	Units	Values [†]	Units
Physical					
Mold Shrinkage	ASTM D 955	0.001	in/in	0.001	mm/mm
Water Absorption, 24 hours at 73°F (23°C)	ASTM D 570	–	%	–	%
Specific Gravity	ASTM D 792	1.71		1.71	
Mechanical					
Tensile Strength at Yield	ASTM D 638	33,000	psi	227	MPa
Tensile Strength at Break	ASTM D 638	33,000	psi	227	MPa
Elongation at Yield	ASTM D 638	2	%	2	%
Elongation at Break	ASTM D 638	2	%	2	%
Tensile Modulus	ASTM D 638	2,500,000	psi	17,000	MPa
Flexural Strength	ASTM D 790	57,000	psi	393	MPa
Flexural Modulus	ASTM D 790	2,200,000	psi	15,000	MPa
Izod Impact Strength	ASTM D 256				
Notched, 1/8" (3.2 mm) , 73°F (23°C)		16	ft-lb/in	854	J/m
Notched, 1/8" (3.2 mm), -40°F (-40°C)		16	ft-lb/in	854	J/m
Instrumented Dart Impact	ASTM D 3763				
Total Energy at 73°F (23°C)		260	in-lb	29	J
Total Energy at -20°F (-29°C)		220	in-lb	25	J
Thermal					
Deflection Temperature Under Load	ASTM D 648				
66 psi (0.45 MPa), unannealed		–	°F	–	°C
66 psi (0.45 MPa), annealed		–	°F	–	°C
264 psi (1.8 MPa), unannealed		260	°F	127	°C
264 psi (1.8 MPa), annealed		260	°F	127	°C
Vicat Temperature	ASTM D 1525	366	°F	186	°C
Coefficient of Linear Thermal Expansion	ASTM D 696	0.6	10 ⁻⁵ in/in/°F	1.1	10 ⁻⁵ mm/mm/°C
Processing Information					
Recommended Drying Temperature		180-210	°F	82-99	°C
Recommended Melt Temperature ⁽¹⁾		460-500	°F	238-260	°C
Recommended Mold Temperature		150-190	°F	66-88	°C

[†]Typical values, not to be construed as specifications. Users should confirm results by their own tests.

(1) Under no circumstances should glass reinforced resins be heated above 500°F (260°C) during molding or purging. This might cause decomposition, leaving a glass-enriched melt which cannot be extruded, and therefore, could seize the screw.

