

Technical Data Sheet

Type: Isoplast® 202 LGF40 is an engineering thermoplastic resin.

Typical 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	1.50		1.50	
Mechanical					
Tensile Strength at Yield	ASTM D 638	27,000	psi	186	MPa
Tensile Strength at Break	ASTM D 638	27,000	psi	186	MPa
Elongation at Yield	ASTM D 638	1.8	%	7	%
Elongation at Break	ASTM D 638	1.8	%	140	%
Tensile Modulus	ASTM D 638	1,700,000	psi	1,200	MPa
Flexural Strength	ASTM D 790	49,000	psi	338	MPa
Flexural Modulus	ASTM D 790	5,500,000	psi	10,000	MPa
Izod Impact Strength					
- Notched, 1/8" (3.2 mm), 73°F (23°C)	ASTM D 256	5	ft-lb/in	267	J/m
- Notched, 1/8" (3.2 mm), -40°F (-40°C)		-	ft-lb/in	-	J/m
Instrumented Dart Impact					
- Total Energy at 73°F (23°C)	ASTM D 3763	150	In-lb	17	J
- Total Energy at -20°F (-29°)		120	In-lb	14	J
Thermal					
Deflection Temperature Under Load					
- 66 psi (0.45 MPa), unannealed	ASTM D 648	330	°F	166	°C
- 66 psi (0.45 MPa), annealed		-	°F	-	°C
- 264 psi (1.8 MPa), unannealed		290	°F	144	°C
- 264 psi (1.8 MPa), annealed		-	°F	-	°C
Vicat Temperature	ASTM D 1525	-	°F	-	°C
Coefficient of Linear Thermal Expansion	ASTM D 696	0.4	10 ⁻⁵ in/in/°F	0.7	10 ⁻⁵ mm/mm/°C
Glass Transition Temperature	ASTM D 3418	280	°F	138	°C
Processing Information					
Recommended Drying Temperature		260-280	°F	127-138	°C
Recommended Melt Temperature		450-500	°F	232-260	°C
Recommended Mold Temperature		200-250	°F	93-121	°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.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

