

GLASS REINFORCED POLYCARBONATE

Polifil® GFPC series compounds offer a combination of improved dimensional stability and heat resistance. The excellent balance of physical properties make the Polifil® glass-filled polycarbonate line an excellent choice for electrical, appliance, and hardware applications. Standard processing techniques are applicable. Use this information as a guide to aid you in selecting the proper resin for your application. TPG will custom compound and fine-tune our formulations for your application.

PHYSICAL	ASTM / Method	Units	Polifil® GFPC-10	Polifil® GFPC-20	Polifil® GFPC-30	Polifil® GFPC-40
Reinforcement Content	TPG WI	%	10	20	30	40
Specific Gravity	D 792	-	1.26	1.35	1.43	1.52
Melt Flow (300/1.2)	D 1238	g/10 min	7*	7*	5*	5*
Water Absorption, 24 Hours	D 570	%	0.2	0.2	0.15	0.15
Mold Shrinkage – 1/8" Specimen	D 955	in/in	0.003	0.003	0.002	0.002

MECHANICAL @ 73°F

Tensile Strength	D 638	psi	11,500	15,800	18,800	20,000
Elongation @ Yield	D 638	%	3.0	3.0	2.0	2.0
Elongation @ Break	D 638	%	10.0	5.0	4.0	3.0
Tensile Modulus	D 638	kpsi	415	851	1,250	1,600
Flexural Modulus (tangent)	D 790	kpsi	570	780	1,150	1,350
Flexural Strength	D 790	psi	14,700	19,000	22,700	26,800
Izod Impact (notched)	D 256	ft-lbs/in	2.5	2.5	2.1	1.8
Gardner Impact (1/2" tup)	D 5420	in-lbs	6	4	4	4
Rockwell Hardness	D 785	R-Scale	118	120	120	120

THERMAL

Deflection Temperature, 66psi	D 648	°F	290	300	300	300
Deflection Temperature, 264psi	D 648	°F	275	295	295	295

**melt flow may be specified*

The property values listed above have been obtained using laboratory controlled test methods. They are offered without guarantee since conditions under which the product is used are beyond our control. Mold shrinkage is intended as a guide only, as specific shrinkage is affected by part design, mold design and molding conditions. Therefore, The Plastics Group disclaims any liability for loss or damage incurred in connection with the use of this product.



An ISO 9001 CERTIFIED COMPANY