

CHEMICALLY COUPLED HIGH IMPACT GLASS REINFORCED POLYPROPYLENE

Polifil® GFRMPPCC series compounds are high impact polypropylenes reinforced with chemically coupled glass fibers. This combination provides higher impact strength while retaining high stiffness. These compounds are used in appliances, electrical components, automotive, and utility products. 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®	Polifil®	Polifil®	Polifil®
			GFRMPPCC 10	GFRMPPCC 20	GFRMPPCC 30	GFRMPPCC 40
Reinforcement Content	TPG WI	%	10	20	30	40
Specific Gravity	D 792	-	0.98	1.04	1.13	1.22
Melt Flow (230/2.16)	D 1238	g/10 min	4-10*	4-10*	4-10*	4-10*
Water Absorption, 24 Hours	D 570	%	nil	nil	nil	nil
Mold Shrinkage – 1/8" Specimen	D 955	in/in	0.006	0.004	0.0035	0.003
MECHANICAL @ 73°F						
Tensile Strength	D 638	psi	6,000	8,100	10,000	12,500
Elongation @ Yield	D 638	%	4.0	4.0	3.0	3.0
Elongation @ Break	D 638	%	7.0	5.0	4.0	3.0
Tensile Modulus	D 638	kpsi	280	380	495	580
Flexural Modulus (tangent)	D 790	kpsi	310	420	560	700
Flexural Strength	D 790	psi	7,100	9,300	12,100	14,000
Izod Impact (notched)	D 256	ft-lbs/in	3.2	3.0	3.0	3.0
Gardner Impact (1/2" tup)	D 5420	in-lbs	12	10	8	6
Rockwell Hardness	D 785	R-Scale	82	88	92	96
THERMAL						
Deflection Temperature, 66psi	D 648	°F	270	290	300	305
Deflection Temperature, 264psi	D 648	°F	250	275	285	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.



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