

**CALCIUM CARBONATE REINFORCED POLYPROPYLENE**

**Polifil® C** series compounds are homopolymer polypropylene resins reinforced with fine particle size calcium carbonate. They combine high impact with stiffness, good colorability, resistance to environmental stress-cracking, good surface, and low mold shrinkage. These compounds are used in appliances, electrical components, housewares, toys, 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.

<b>PHYSICAL</b>	<b>ASTM / Method</b>	<b>Units</b>	<b>Polifil® C-10</b>	<b>Polifil® C-20</b>	<b>Polifil® C-30</b>	<b>Polifil® C-40</b>
Reinforcement Content	TPG WI	%	10	20	30	40
Specific Gravity	D 792	-	0.98	1.05	1.15	1.24
Melt Flow (230/2.16)	D 1238	g/10 min	8-12*	8-12*	8-12*	8-12*
Water Absorption, 24 Hours	D 570	%	nil	nil	nil	nil
Mold Shrinkage – 1/8" Specimen	D 955	in/in	0.015	0.013	0.012	0.010
<b>MECHANICAL @ 73°F</b>						
Tensile Strength	D 638	psi	4,400	4,100	3,800	3,400
Elongation @ Yield	D 638	%	8.0	7.0	6.0	5.0
Elongation @ Break	D 638	%	30	30	40	25
Tensile Modulus	D 638	kpsi	210	240	270	300
Flexural Modulus (tangent)	D 790	kpsi	230	270	300	320
Flexural Strength	D 790	psi	5,100	5,500	6,000	6,500
Izod Impact (notched)	D 256	ft-lbs/in	0.70	0.75	0.75	0.70
Gardner Impact (1/2" tup)	D 5420	in-lbs	24	40	60	60
Hardness, Shore	D 1415	D-Scale	72	74	75	76
<b>THERMAL</b>						
Deflection Temperature, 66psi	D 648	°F	200	210	220	235
Deflection Temperature, 264psi	D 648	°F	130	135	140	145

*\*melt flow may be specified*



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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.