



# POLIFIL® GFPC DATA SHEET

DOING THE NEEDFUL SINCE 1973

## Glass-Reinforced Polycarbonate

**Polifil® GFPC** series compounds offer a combination of improved dimensional stability and decreased flammability. 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	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 (g/10 min)	D 1238	7*	7*	5*	5*
Water absorption, 24 hours (%)	D 570	0.2	0.2	0.15	0.15
Mold shrinkage – 1/8" specimen (in/in)	D 955	0.003	0.003	0.002	0.002

### MECHANICAL @ 73°F

Tensile strength (psi)	D 638	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 (kpsi)	D 638	415	851	1,250	1,600
Flexural modulus, tangent (kpsi)	D 790	570	780	1,150	1,350
Flexural strength (psi)	D 790	14,700	19,000	22,700	26,800
Izod impact, notched (ft-lbs/in)	D 256	2.5	2.5	2.1	1.8
Gardner impact, 1/2" tup (in-lbs)	D 5420	6	4	4	4
Rockwell hardness (R-scale)	D 785	118	120	120	120

### THERMAL

Deflection temperature, 66psi (°F)	D 648	290	300	300	300
Deflection temperature, 264psi (°F)	D 648	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.

The Plastics Group of America

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