



We deliver innovation in the form of high quality plastic resins

# Polifil® GFPP

Glass Reinforced Polypropylene

**Polifil® GFPP** series compounds are homopolymer polypropylene resins reinforced with glass fibers. They provide high impact with increased strength, stiffness, surface hardness, and higher continuous temperature. Other benefits include reduced distortion under long-term stress. 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 Property Data Sheet

PHYSICAL	ASTM / Method	Units	Polifil® GFPP-10	Polifil® GFPP-20	Polifil® GFPP-30	Polifil® GFPP-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	0.005	0.003	0.003	0.002

MECHANICAL @ 73°F						
Tensile Strength	D 638	psi	5,700	6,500	7,100	7,800
Elongation @ Yield	D 638	%	3.0	3.0	3.0	2.0
Elongation @ Break	D 638	%	6.0	4.0	4.0	3.0
Tensile Modulus	D 638	kpsi	295	405	520	630
Flexural Modulus (tangent)	D 790	kpsi	340	436	620	800
Flexural Strength	D 790	psi	7,400	8,200	10,500	11,400
Izod Impact (notched)	D 256	ft-lbs/in	1.0	1.2	1.2	1.2
Gardner Impact (1/2" tup)	D 5420	in-lbs	8	6	4	4
Rockwell Hardness	D 785	R-Scale	85	90	96	102

THERMAL						
Deflection Temperature, 66psi	D 648	°F	285	300	310	315
Deflection Temperature, 264psi	D 648	°F	255	270	290	300

\*melt flow may be specified

## An ISO 9001:2000 Certified Company

The test results and property values listed have been obtained using laboratory-controlled test results. They are offered without guarantee since conditions under which our 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. Polifil®, therefore, disclaims any liability for loss or damage incurred in connection with product's use.

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