POLIFIL® GFPP DATA SHEET

DOING THE NEEDFUL SINCE 1973

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	ASTM/ Method	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 (g/10 min)	D 1238	4-10*	4-10*	4-10*	4-10*
Water absorption, 24 hours (%)	D 570	nil	nil	nil	nil
Mold shrinkage – 1/8˝ specimen (in/in)	D 955	0.005	0.003	0.003	0.002
MECHANICAL @ 73°F					
Tensile strength (psi)	D 638	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 (kpsi)	D 638	295	405	520	630
Flexural modulus, tangent (kpsi)	D 790	340	436	620	800
Flexural strength (psi)	D 790	7,400	8,200	10,500	11,400
Izod impact, notched (ft-lbs/in)	D 256	1.0	1.2	1.2	1.2
Gardner impact, 1/2˝ tup (in-lbs)	D 5420	8	6	4	4
Rockwell hardness (R-scale)	D 785	85	90	96	102
THERMAL					
Deflection temperature, 66psi (°F)	D 648	285	300	310	315
Deflection temperature, 264psi (°F)	D 648	255	270	290	300

**melt flow may be specified*