POLIFIL® GFN/MRN 6/6 DATA SHEET

DOING THE NEEDFUL SINCE 1973

Glass & Mineral Reinforced Nylons 6/6

Polifil® GFN/MRN 6/6 reinforced series of compounds offer superior strength, rigidity and creep resistance. Glass fibers provide excellent thermal and dimensional stability while maintaining good heat and chemical resistance. Polifil® GFN/MRN are excellent candidates for bike components and fuel caps, as well as other automotive components. 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® 628-13GF	Polifil® 628-33GF	Polifil® 71MR	Polifil® 78MRGF
Reinforcement content (%)	TPG WI	13	33	40	40
Specific gravity	D 792	1.22	1.38	1.50	1.45
Melt flow (g/10 min)	D 1238	n/a	n/a	n/a	n/a
Water absorption, 24 hours (%)	D 570	1.1	0.75	0.6	0.7
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	14,000	24,000	12,800	18,000
Elongation @ yield (%)	D 638	2	3	3	2
Elongation @ break (%)	D 638	3	3	12	5
Tensile modulus (kpsi)	D 638	740	1,400	700	1,000
Flexural modulus, tangent (kpsi)	D 790	700	1,200	560	950
Flexural strength (psi)	D 790	20,000	33,000	20,000	27,000
Izod impact, notched (ft-lbs/in)	D 256	1.0	2.1	1.1	1.2
Gardner impact, 1/2˝ tup (in-lbs)	D 5420	6	4	12	5
Rockwell hardness (R-scale)	D 795	120	120	115	120
THERMAL					
Deflection temperature, 66psi (°F)	D 648	480	490	473	495
Deflection temperature, 264psi (°F)	D 648	470	480	437	455

**all properties tested dry as molded*