

GLASS & MINERAL REINFORCED NYLON 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 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	Units	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	D 1238	g/10 min	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	D 955	in/in	0.005	0.003	0.003	0.002
MECHANICAL @ 73°F*						
Tensile Strength	D 638	psi	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	D 638	kpsi	740	1,400	700	1,000
Flexural Modulus (tangent)	D 790	kpsi	700	1,200	560	950
Flexural Strength	D 790	psi	20,000	33,000	20,000	27,000
Izod Impact (notched)	D 256	ft-lbs/in	1.0	2.1	1.1	1.2
Gardner Impact (1/2” tup)	D 5420	in-lbs	6	4	12	5
Rockwell Hardness	D 795	R-Scale	120	120	115	120
THERMAL						
Deflection Temperature, 66psi	D 648	°F	480	490	473	495
Deflection Temperature, 264psi	D 648	°F	470	480	437	455

**all properties tested dry as molded*



An ISO 9001 CERTIFIED COMPANY

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.