

NYLON 6/6

Polifil® NYLON 6/6 combines good abrasion and chemical resistance. These properties have been proven to work in the following applications: valves, bearings, and bearing cages. 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® 625L	Polifil® 627L	Polifil® 638L
Reinforcement Content	TPG WI	%	0	0	0
Specific Gravity	D 792	-	1.09	1.08	1.14
Melt Flow	D 1238	g/10 min	n/a	n/a	n/a
Water Absorption, 24 Hours	D 570	%	1.2	1.3	1.5
Mold Shrinkage – 1/8" Specimen	D 955	in/in	0.015	0.015	0.015
MECHANICAL @ 73°F*					
Tensile Strength	D 638	psi	7,500	6,800	11,800
Elongation @ Yield	D 638	%	8.0	7.0	5.0
Elongation @ Break	D 638	%	60	80	50
Tensile Modulus	D 638	kpsi	310	260	440
Flexural Modulus (tangent)	D 790	kpsi	280	248	406
Flexural Strength	D 790	psi	10,000	7,800	13,000
Izod Impact (notched)	D 256	ft-lbs/in	4.5	16	1.0
Gardner Impact (1/2" tup)	D 5420	in-lbs	100	>200	60
Rockwell Hardness	D 785	R-Scale	113	105	119
THERMAL					
Deflection Temperature, 66psi	D 648	°F	440	400	455
Deflection Temperature, 264psi	D 648	°F	167	140	194

**all properties tested dry as molded*



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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.