



POLIFIL® NYLON 6/6 DATA SHEET

DOING THE NEEDFUL SINCE 1973

NYLON 6/6 Resins

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 cases. 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® 625L	Polifil® 627L	Polifil® 638L
Reinforcement content (%)	TPG WI	0	0	0
Specific gravity	D 792	1.09	1.08	1.14
Melt flow (g/10 min)	D 1238	n/a	n/a	n/a
Water absorption, 24 hours (%)	D 570	1.2	1.3	1.5
Mold shrinkage – 1/8" specimen (in/in)	D 955	0.015	0.015	0.015
MECHANICAL @ 73°F*				
Tensile strength (psi)	D 638	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 (kpsi)	D 638	310	260	440
Flexural modulus, tangent (kpsi)	D 790	280	248	406
Flexural strength (psi)	D 790	10,000	7,800	13,000
Izod impact, notched (ft-lbs/in)	D 256	4.5	16	1.0
Gardner impact, 1/2" tup (in-lbs)	D 5420	100	>200	60
Rockwell hardness (R-scale)	D 785	113	105	119
THERMAL				
Deflection temperature, 66psi (°F)	D 648	440	400	455
Deflection temperature, 264psi (°F)	D 648	167	140	194

**all properties tested dry as molded*

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.

The Plastics Group of America

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