

POLIFIL® NYLON 6 DATA SHEET

DOING THE NEEDFUL SINCE 1973

NYLON 6 Resins

Polifil® NYLON 6 provides superior strength and rigidity with electrical resistance and surface lubricity. These properties have been proven to work in the following applications: automotive, housings, bearings as well as appliances. 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 [®] 930L	Polifil [®] 836L
Reinforcement content (%)	TPG WI	0	0
Specific gravity	D 792	1.13	1.09
Melt flow (g/10 min)	D 1238	n/a	n/a
Water absorption, 24 hours (%)	D 570	1.6	1.3
Mold shrinkage – 1/8" specimen (in/in)	D 955	0.012	0.012
MECHANICAL @ 73°F*			
Tensile strength (psi)	D 638	11,500	9,400
Elongation @ yield (%)	D 638	8	9
Elongation @ break (%)	D 638	40	60
Tensile modulus (kpsi)	D 638	440	360
Flexural modulus, tangent (kpsi)	D 790	390	320
Flexural strength (psi)	D 790	15,000	12,000
Izod impact, notched (ft-lbs/in)	D 256	1.1	2.5
Gardner impact, 1/2" tup (in-lbs)	D 5420	12	100
Rockwell hardness (R-scale)	D 785	116	108
THERMAL			
Deflection temperature, 66psi (°F)	D 648	360	300
Deflection temperature, 264psi (°F)	D 648	145	140

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.