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*