

# Polifil® Nylon 627L

Polyamide 66

The Plastics Group

## Message:

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.

General Information			
Features	Good Abrasion Resistance		
	Good Chemical Resistance		
Uses	Bearings		
	Valves/Valve Parts		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.08	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	1.5	%	ASTM D955
Water Absorption (24 hr)	1.3	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	105		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	1790	MPa	ASTM D638
Tensile Strength (23°C)	46.9	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield, 23°C	7.0	%	
Break, 23°C	80	%	
Flexural Modulus - Tangent (23°C)	1710	MPa	ASTM D790
Flexural Strength (23°C)	53.8	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	850	J/m	ASTM D256
Gardner Impact (23°C, 12.7 mm)	> 22.6	J	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	204	°C	
1.8 MPa, Unannealed	60.0	°C	
Injection	Nominal Value	Unit	
Drying Temperature	104	°C	
Drying Time	2.0	hr	

Rear Temperature	288	°C
Middle Temperature	274	°C
Front Temperature	282	°C
Nozzle Temperature	288	°C
Processing (Melt) Temp	282 to 304	°C
Mold Temperature	37.8 to 93.3	°C
Injection Rate	Fast	
Back Pressure	0.172 to 0.517	MPa
Screw Speed	30 to 60	rpm

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

