

Polymer Resources NY6-GP1 General Purpose Nylon 6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Unreinforced

Material Notes:

General Purpose Nylon 6, Lubricated Process: Injection Molding Notes: All physical, mechanical and thermal testing conducted on 1/8-inch thick, un-pigmented, test samples. Nylon grades are tested dry as molded (DAM). Information provided by Polymer Resources Corporation.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Polymer-Resources-NY6-GP1-General-Purpose-Nylon-6.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.13 g/cc	1.13 g/cc	ASTM D792
Linear Mold Shrinkage	0.011 - 0.015 cm/cm	0.011 - 0.015 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	75.8 MPa	11000 psi	ASTM D638
Tensile Strength, Yield	75.8 MPa	11000 psi	ASTM D638
Flexural Strength	106 MPa	15400 psi	ASTM D790
Flexural Modulus	2.76 GPa	400 ksi	ASTM D790
Izod Impact, Notched	0.534 J/cm @Temperature 22.8 °C	1.00 ft-lb/in @Temperature 73.0 °F	ASTM D256
Gardner Impact	36.2 J	26.7 ft-lb	ASTM D3029

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	177 °C	350 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	65.6 °C	150 °F	ASTM D648
UL RTI, Electrical	125 °C	257 °F	UL 746
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	125 °C	257 °F	UL 746
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	125 °C	257 °F	UL 746
@Thickness 3.00 mm	@Thickness 0.118 in		
	125 °C	257 °F	UL 746
	@Thickness 5.99 mm	@Thickness 0.236 in	

Thermal Properties	Metric	English	Comments
UL RTI, Mechanical with Impact	85.0 °C	185 °F	UL 746
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	85.0 °C	185 °F	UL 746
UL RTI, Mechanical without Impact	75.0 °C	167 °F	UL 746
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	75.0 °C	167 °F	UL 746
Flammability, UL94	V-2	V-2	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	V-2	V-2	
UL RTI, Mechanical with Impact	85.0 °C	185 °F	UL 746
	@Thickness 3.00 mm	@Thickness 0.118 in	
	85.0 °C	185 °F	UL 746
UL RTI, Mechanical without Impact	75.0 °C	167 °F	UL 746
	@Thickness 3.00 mm	@Thickness 0.118 in	
	75.0 °C	167 °F	UL 746
Flammability, UL94	V-2	V-2	
	@Thickness 5.99 mm	@Thickness 0.236 in	
	V-2	V-2	
UL RTI, Mechanical with Impact	85.0 °C	185 °F	UL 746
	@Thickness 5.99 mm	@Thickness 0.236 in	
	85.0 °C	185 °F	UL 746

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+11 ohm-cm	1.00e+11 ohm-cm	ASTM D257
Dielectric Strength	29.1 kV/mm	740 kV/in	ASTM D149
Comparative Tracking Index	>= 600 V	>= 600 V	UL 746
Hot Wire Ignition, HWI	15 - 30 sec	15 - 30 sec	UL 746
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	30 - 60 sec	30 - 60 sec	UL 746
Hot Wire Ignition, HWI	30 - 60 sec	30 - 60 sec	UL 746
	@Thickness 3.00 mm	@Thickness 0.118 in	
	30 - 60 sec	30 - 60 sec	UL 746
High Amp Arc Ignition, HAI	>= 120 arcs	>= 120 arcs	UL 746
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	>= 120 arcs	>= 120 arcs	UL 746
High Amp Arc Ignition, HAI	>= 120 arcs	>= 120 arcs	UL 746
	@Thickness 3.00 mm	@Thickness 0.118 in	
	>= 120 arcs	>= 120 arcs	UL 746

Electrical Properties	Metric	English	Comments
	55 - 120 arcs	75 - 20 arcs	UL 746
	@Thickness 5.99 mm	@Thickness 0.236 in	
High Voltage Arc-Tracking Rate, HVTR	0.000 - 10.0 mm/min	0.000 - 0.394 in/min	UL 746

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	221 - 246 °C	430 - 475 °F	
Middle Barrel Temperature	238 - 254 °C	460 - 490 °F	
Front Barrel Temperature	243 - 260 °C	470 - 500 °F	
Melt Temperature	238 - 279 °C	460 - 535 °F	
Mold Temperature	65.6 - 82.2 °C	150 - 180 °F	
Drying Temperature	73.9 - 85.0 °C	165 - 185 °F	
Dry Time	3.00 - 4.00 hour	3.00 - 4.00 hour	

Descriptive Properties	Value	Comments
Vent	0.0003	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China