



Wednesday, August 30, 2023

PRL NY6-GP2

Polymer Resources Ltd. - Polyamide 6

Units

English ▼

Action

Legend (Open)

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Lubricant	• Nucleating Agent	
Features	• General Purpose	• Lubricated	• Nucleated
Uses	• General Purpose		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E113219		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Molding Shrinkage - Flow (0.125 in)	8.0E-3 to 0.012	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	13000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	13000	psi	ASTM D638
Flexural Modulus (0.125 in)	450000	psi	ASTM D790
Flexural Strength (0.125 in)	15700	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Gardner Impact (0.125 in)	320	in·lb	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	375	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	165	°F	ASTM D648
RTI Elec			UL 746B
0.031 in	257	°F	
0.06 in	257	°F	
0.12 in	257	°F	
0.24 in	257	°F	
RTI Imp			UL 746B
0.031 in	149	°F	
0.06 in	167	°F	
0.12 in	167	°F	
0.24 in	167	°F	
RTI Str			UL 746B
0.031 in	149	°F	
0.06 in	185	°F	
0.12 in	185	°F	
0.24 in	185	°F	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (0.0315 in)	760	V/mil	ASTM D149
Comparative Tracking Index (CTI) (0.0315 in)	PLC 0		UL 746A
High Amp Arc Ignition (HAI)			UL 746A
0.03 in	PLC 0		
0.06 in	PLC 0		

0.12 in	PLC 0	
0.24 in	PLC 0	
High Voltage Arc Tracking Rate (HVTR) (0.0315 in)	PLC 1	UL 746A
Hot-wire Ignition (HWI)		UL 746A
0.03 in	PLC 4	
0.06 in	PLC 4	
0.12 in	PLC 3	
0.24 in	PLC 2	
Flammability	Nominal Value	Unit Test Method
Flame Rating		UL 94
0.031 in	V-2	
0.06 in	V-2	
0.12 in	V-2	
0.24 in	V-2	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	165 to 185	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	430 to 475	°F
Middle Temperature	460 to 490	°F
Front Temperature	470 to 500	°F
Processing (Melt) Temp	460 to 535	°F
Mold Temperature	175 to 200	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

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