

Polymer Resources

Classic® Engineering Plastic Compounds

Wednesday, August 30, 2023

PRL NY66-GP2

Units English

Polymer Resources Ltd. - Polyamide 66

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		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.012 to 0.018	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.125 in)	0.015 to 0.021	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (0.125 in)	490000	psi	ASTM D638
Tensile Strength (Yield, 0.125 in)	13000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	13000	psi	ASTM D638
Tensile Strain (Yield, 0.125 in)	4.5	%	ASTM D638
Tensile Strain (Break, 0.125 in)	30	%	ASTM D638
Flexural Modulus (0.125 in)	440000	psi	ASTM D790
Flexural Strength (0.125 in)	17000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.8	ft·lb/in ²	
73°F	2.0	ft·lb/in ²	
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	1.5	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	475	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	215	°F	ASTM D648

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	510 to 530	°F
Middle Temperature	520 to 540	°F
Front Temperature	530 to 550	°F
Processing (Melt) Temp	530 to 560	°F
Mold Temperature	150 to 200	°F

Notes

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

The information contained herein is based on our best knowledge and we believe it to be true and accurate. Please read all

statements and recommendations in conjunction with the technical data sheets apply to all goods sold by us. Statements concerning possible uses of materials described herein are not to be construed as recommendations for use of such materials in the infringement of any patent or copyright. Lot data is available upon request. The user of this material must make their own evaluations to determine the suitability of this material from a technical as well as health, safety and environmental standpoint. This data is not intended for specification purposes.