



Wednesday, August 30, 2023



PRL PC-GP1-TFE10

Polymer Resources Ltd. - Polycarbonate

Units English

Action

Legend [\(Open\)](#)



General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• PTFE Lubricant: 10%		
Features	• General Purpose	• Medium Flow	• Wear Resistant
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	7.0 to 12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	8000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	8000	psi	ASTM D638
Flexural Modulus (0.125 in)	300000	psi	ASTM D790
Flexural Strength (0.125 in)	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	3.0	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)	278	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	267	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	245 to 255	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	550 to 590	°F
Middle Temperature	570 to 610	°F
Front Temperature	590 to 630	°F
Processing (Melt) Temp	600 to 650	°F
Mold Temperature	180 to 240	°F

Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

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