



Wednesday, August 30, 2023

PRL PC-GP1S

Polymer Resources Ltd. - Polycarbonate

Units English ▼

Action

Legend ([Open](#))



General Information

Product Description		
Sustainable Grade, Low Flow Polycarbonate, Containing >50% Recycled Content		
General		
Material Status	• Commercial: Active	
Availability	• North America	
Recycled Content	• Yes, 50%	
Features	• General Purpose • Low Flow	
RoHS Compliance	• RoHS Compliant	
Forms	• Pellets	
Processing Method	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	5.0 to 10	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)	9000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	9500	psi	ASTM D638
Flexural Modulus (0.125 in)	330000	psi	ASTM D790
Flexural Strength (0.125 in)	13400	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	10	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)	265	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	255	°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	520 to 560	°F
Middle Temperature	540 to 580	°F
Front Temperature	560 to 600	°F
Processing (Melt) Temp	550 to 600	°F
Mold Temperature	160 to 200	°F

Notes

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

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