

Classic* Engineering Plastic Compounds

Monday, October 4, 2021

PRL PC UT1

Product Description

Polymer Resources Ltd. - Polycarbonate

Legend (<u>Open</u>)

Units English V

Action

General Information

Utility Grade I ow Flow Polycarbonate

General				
Material Status	Preliminary Data			
Availability	North America			
Features	General Purpose Low Flow			
RoHS Compliance	RoHS Compliant			
Forms	Pellets			
Processing Method	Injection Molding			
	ASTM & ISO Droportion 1			

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	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3 i	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 f	ft·lb/in	ASTM D256
Gardner Impact (0.125 in)	> 320 i	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	Nomi	nal Value	Unit
Drying Temperature	2	245 to 255	°F
Drying Time		3.0 to 4.0	hr
Drying Time, Maximum		8.0	hr
Rear Temperature	5	520 to 560	°F
Middle Temperature	5	540 to 580	°F
Front Temperature	5	560 to 600	°F
Processing (Melt) Temp	5	550 to 600	°F
Mold Temperature	1	60 to 200	°F

Notes

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

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