



Thursday, September 30, 2021

PRL PC UT1

Polymer Resources Ltd. - Polycarbonate

Units English ▼

Action

Legend ([Open](#))

General Information

Product Description

Utility Grade Low 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 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.

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 our conditions of sale, which 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.