



Wednesday, August 30, 2023

PRL PC-HH

Polymer Resources Ltd. - Polycarbonate

Units English ▼**Action****Legend** ([Open](#))**General Information****General**

Material Status	• Commercial: Active
Availability	• North America
Features	• High Heat Resistance • 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	1.19		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	2.0 to 5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	6.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	9600	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	10800	psi	ASTM D638
Flexural Modulus (0.125 in)	310000	psi	ASTM D790
Flexural Strength (0.125 in)	14000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	7.0	ft-lb/in	ASTM D256
Gardner Impact (0.125 in)	100	in-lb	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	310	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	295	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250 to 265	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	570 to 640	°F
Middle Temperature	570 to 640	°F
Front Temperature	620 to 700	°F
Processing (Melt) Temp	600 to 650	°F
Mold Temperature	170 to 210	°F

Notes¹ Typical properties: these are not to be construed as specifications.

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