Polymer Resources
Classic® Engineering Plastic Compounds

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

Notes

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