



Wednesday, August 30, 2023

## PRL PC-HM-FR1-(color)-3

Polymer Resources Ltd. - Polycarbonate

Units English ▼

## Action

Legend ([Open](#))

## General Information

## General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Additive	• UV Stabilizer
Features	• Flame Retardant • UV Resistant
RoHS Compliance	• RoHS Compliant
UL File Number	• E113219
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.26		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	5.0 to 12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	9500	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	8100	psi	ASTM D638
Flexural Modulus (0.125 in)	490000	psi	ASTM D790
Flexural Strength (0.125 in)	14900	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	290	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	280	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in, ALL		V-0	
0.12 in, ALL	•	V-0	
	•	5VA	

## 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	560 to 600	°F
Middle Temperature	580 to 620	°F
Front Temperature	600 to 640	°F
Processing (Melt) Temp	575 to 625	°F
Mold Temperature	180 to 240	°F

## Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

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to determine the suitability of this material from a safety and environmental standpoint. This data is not intended for specification purposes.