+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Polymer Resources
Classic® Engineering Plastic Compounds

Wednesday, August 30, 2023

PRL PC-G20

Polymer Resources Ltd. - *Polycarbonate*

Units English

Action **Legend (Open)**

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Flame Retardant	• High Heat Resistance	• Self Extinguishing
RoHS Compliance	• RoHS Compliant		
UL File Number	• E113219		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.35		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	4.0 to 10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 4.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield, 0.125 in)	17000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	17000	psi	ASTM D638
Flexural Modulus (0.125 in)	750000	psi	ASTM D790
Flexural Strength (Break, 0.125 in)	19200	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.5	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	300	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	285	°F	ASTM D648
RTI Elec			UL 746B
0.07 in	176	°F	
0.12 in	176	°F	
RTI Imp			UL 746B
0.07 in	176	°F	
0.12 in	176	°F	
RTI Str			UL 746B
0.07 in	176	°F	
0.12 in	176	°F	
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.07 in, ALL	V-2		
0.12 in	V-0		

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

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