



Wednesday, August 30, 2023

PRL PC-FR2-TFE

Polymer Resources Ltd. - Polycarbonate

Units

English ▼

Action	Legend (Open)

General Information

General		
Material Status	• Commercial: Active	
Availability	• North America	
Additive	• Flame Retardant	• PTFE Lubricant: 5%
Features	• Flame Retardant	• Lubricated
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	1.26		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	9.0 to 16	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 0.010	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	8250	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	8250	psi	ASTM D638
Tensile Elongation (Yield, 0.125 in)	> 10	%	ASTM D638
Flexural Modulus (0.125 in)	350000	psi	ASTM D790
Flexural Strength (0.125 in)	12000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.2	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)	275	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	265	°F	ASTM D648
RTI Elec			UL 746B
0.06 in	176	°F	
0.12 in	176	°F	
RTI Imp			UL 746B
0.06 in	176	°F	
0.12 in	176	°F	
RTI Str			UL 746B
0.06 in	176	°F	
0.12 in	176	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	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	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	170 to 210 °F

Notes

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

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