



Wednesday, August 30, 2023

PRL PCSF-FR

Polymer Resources Ltd. - Polycarbonate

Units

English ▼

Action

Legend ([Open](#))

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 5.0% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant	• High Heat Resistance	• Self Extinguishing
	• Foamable	• Medium Heat Resistance	
	• Good Impact Resistance	• Medium Impact Resistance	
Uses	• Structural Foam		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E113219		
Forms	• Pellets		
Processing Method	• Structural Foam Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		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)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	8500	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	8100	psi	ASTM D638
Flexural Modulus (0.125 in)	460000	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)	3.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	280	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	268	°F	ASTM D648
RTI Elec (0.24 in)	176	°F	UL 746B
RTI Imp (0.24 in)	176	°F	UL 746B
RTI Str (0.24 in)	176	°F	UL 746B
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.24 in, ALL)	V-0		UL 94

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	490 to 510	°F
Middle Temperature	560 to 590	°F
Front Temperature	560 to 590	°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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F-FR Polycarbonate

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