



Wednesday, August 30, 2023

PRL PCSF-FR1

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	• Flame Retardant		
Features	• Flame Retardant	• Good Impact Resistance	• Medium Heat Resistance
	• Foamable	• High Heat Resistance	• Self Extinguishing
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	1.27		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)	3.0E-3 to 6.0E-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)	9150	psi	ASTM D638
Flexural Modulus (0.125 in)	550000	psi	ASTM D790
Flexural Strength (0.125 in)	15800	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
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	160 to 220	°F

Notes

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

The information contained herein is based on our best knowledge and we believe it to be true and accurate. Please read all statements and recommendations in conjunction with our conditions of sale, which apply to all goods sold by us. Statements concerning possible uses of materials described herein are not to be construed as recommendations for use of such materials in the

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

FR1 Polycarbonate

infringement of any patent or copyright. Lot data to determine the suitability of this material from a technical as well as health, safety and environmental standpoint. This data is not intended for specification purposes. If this material must make their own evaluations