



Wednesday, August 30, 2023

PRL PCSF-FR-G30

Polymer Resources Ltd. - Polycarbonate

Units English ▼**Action****Legend ([Open](#))****General Information****General**

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Good Impact Resistance • Self Extinguishing • Foamable • High Heat Resistance
Uses	• Structural Foam
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Structural Foam Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.43		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	3.0 to 12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 3.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	18000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	18000	psi	ASTM D638
Flexural Modulus (0.125 in)	1.00E+6	psi	ASTM D790
Flexural Strength (0.125 in)	22000	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)	305	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	295	°F	ASTM D648

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 200	°F

Notes¹ Typical properties: these are not to be construed as specifications.

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