



Wednesday, August 30, 2023

**PRL TP-GFMF1**Units English ▼Polymer Resources Ltd. - *Polybutylene Terephthalate***Action****Legend** ([Open](#))**General Information****General**

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight
Additive	• Flame Retardant
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 <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.75		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	2.0 to 8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 0.125 in)	14000	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	14000	psi	ASTM D638
Flexural Modulus (0.125 in)	1.45E+6	psi	ASTM D790
Flexural Strength (0.125 in)	23000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.0	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	400	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	370	°F	ASTM D648
RTI Elec (0.06 in)	266	°F	UL 746B
RTI Imp (0.06 in)	266	°F	UL 746B
RTI Str (0.06 in)	266	°F	UL 746B
Electrical	Nominal Value	Unit	Test Method
High Amp Arc Ignition (HAI) (0.06 in)	PLC 0		UL 746A
Hot-wire Ignition (HWI) (0.06 in)	PLC 0		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	240 to 250	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	470 to 490	°F
Middle Temperature	480 to 500	°F
Front Temperature	490 to 510	°F
Processing (Melt) Temp	480 to 530	°F
Mold Temperature	160 to 200	°F

**Notes**<sup>1</sup> Typical properties: these are not to be construed as specifications.

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