

**PRL TP-FR2****Polymer Resources Ltd. - Polybutylene Terephthalate**Units **Action****Legend (Open)****General Information****General**

Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Flame Retardant</li> </ul>
Features	<ul style="list-style-type: none"> <li>Flame Retardant</li> <li>Self Extinguishing</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
UL File Number	<ul style="list-style-type: none"> <li>E113219</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>

**ASTM & ISO Properties <sup>1</sup>****Physical**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.39		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	10 to 18	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.015 to 0.020	in/in	ASTM D955

**Mechanical**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Yield, 0.125 in)	8400	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	8400	psi	ASTM D638
Flexural Modulus (0.125 in)	375000	psi	ASTM D790
Flexural Strength (0.125 in)	14000	psi	ASTM D790

**Impact**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Gardner Impact (0.125 in)	320	in·lb	ASTM D3029

**Thermal**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	300	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	155	°F	ASTM D648

**RTI Elec**

0.031 in	266	°F	
0.06 in	266	°F	
0.12 in	266	°F	

**RTI Imp**

0.031 in	248	°F	
0.06 in	248	°F	
0.12 in	248	°F	

**RTI Str**

0.031 in	266	°F	
0.06 in	266	°F	
0.12 in	266	°F	

**Electrical**

	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (0.0315 in)	990	V/mil	ASTM D149
Arc Resistance (0.0315 in)	PLC 6		ASTM D495
Comparative Tracking Index (CTI) (0.0315 in)	PLC 2		UL 746A
High Amp Arc Ignition (HAI)			UL 746A
0.03 in	PLC 0		
0.06 in	PLC 0		
0.12 in	PLC 0		
High Voltage Arc Tracking Rate (HVTR) (0.0315 in)	PLC 3		UL 746A

0.03 in	PLC 4
0.06 in	PLC 3
0.12 in	PLC 2

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.031 in, ALL	V-0		
0.06 in, ALL	V-0		
0.12 in, ALL	•	V-0 5VA	

### 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	450 to 480	°F
Middle Temperature	460 to 490	°F
Front Temperature	470 to 500	°F
Processing (Melt) Temp	450 to 500	°F
Mold Temperature	110 to 140	°F

### Notes

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

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