

**PRL PC-FR1A-D**

PC

Polymer Resources, Ltd.

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Melt Flow Index, MFI	<b>7.5</b>	g/10min	ASTM D 1238
Temperature	<b>300</b>	°C	-
Load	<b>1.2</b>	kg	-
Mold Shrinkage, MD	<b>0.006</b>	mm/mm	ASTM D 955
Mold Shrinkage, TD	<b>0.006</b>	mm/mm	ASTM D 955
<b>Mechanical properties</b>			
<b>ASTM Data</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Tensile Strength at Yield	<b>62.1</b>	MPa	ASTM D 638
Tensile Strength at Break	<b>55.2</b>	MPa	ASTM D 638
Elongation at Yield	<b>7</b>	%	ASTM D 638
Elongation at Break	<b>90</b>	%	ASTM D 638
Flexural Modulus	<b>2206</b>	MPa	ASTM D 790
Flexural Strength	<b>89.6</b>	MPa	ASTM D 790
Rockwell Hardness	<b>M70</b>	-	ASTM D 785
Izod Impact notched, 1/8 in	<b>641</b>	J/m	ASTM D 256
<b>Thermal properties</b>			
<b>ASTM Data</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
UL 94 Flame rating	<b>V-2</b>	-	UL 94
Thickness tested	<b>1.5</b>	mm	-
DTUL @ 66 psi	<b>135</b>	°C	ASTM D 648
DTUL @ 264 psi	<b>129</b>	°C	ASTM D 648
Vicat Temperature	<b>149</b>	°C	ASTM D 1525
<b>Electrical properties</b>			
<b>ISO Data</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Comparative tracking index	<b>325</b>	-	IEC 60112
<b>ASTM Data</b>			
Dielectric Strength, Short Time	<b>25.2</b>	kV/mm	ASTM D 149
Volume Resistivity	<b>1E15</b>	Ohm*cm	ASTM D 257
Arc Resistance	<b>150</b>	s	ASTM D 495
<b>Optical properties</b>			
<b>ASTM Data</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Haze	<b>1</b>	%	ASTM D 1003
Light Transmittance	<b>85</b>	%	ASTM D 1003
<b>Other properties</b>			
<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>	
Density	<b>1210</b>	kg/m <sup>3</sup>	ASTM D 792
<b>Processing Recommendation Injection Molding</b>			
<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>	
Pre-drying - Temperature	<b>118 - 124</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Melt temperature	<b>316 - 343</b>	°C	-
Mold temperature	<b>82.2 - 116</b>	°C	-
Zone 1	<b>288 - 310</b>	°C	-
Zone 2	<b>299 - 321</b>	°C	-
Zone 3	<b>310 - 332</b>	°C	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Flame retarding agent

**Special Characteristics**

Flame retardant, High impact or impact modified

**Regional Availability**

North America