

**PRL PC-FD2-(color)-1**

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>12.5</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>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Tensile Strength at Yield	<b>62.1</b>	MPa	ASTM D 638
Tensile Strength at Break	<b>68.9</b>	MPa	ASTM D 638
Elongation at Yield	<b>6.5</b>	%	ASTM D 638
Elongation at Break	<b>140</b>	%	ASTM D 638
Flexural Modulus	<b>2310</b>	MPa	ASTM D 790
Flexural Strength	<b>95.8</b>	MPa	ASTM D 790
Rockwell Hardness	<b>M70</b>	-	ASTM D 785
Izod Impact notched, 1/8 in	<b>801</b>	J/m	ASTM D 256

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
DTUL @ 66 psi	<b>135</b>	°C	ASTM D 648
DTUL @ 264 psi	<b>129</b>	°C	ASTM D 648
Vicat Temperature	<b>152</b>	°C	ASTM D 1525

<b>Optical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Haze	<b>1</b>	%	ASTM D 1003
Light Transmittance	<b>88</b>	%	ASTM D 1003

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1200</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>288 - 316</b>	°C	-
Mold temperature	<b>71.1 - 93.3</b>	°C	-
Zone 1	<b>271 - 293</b>	°C	-
Zone 2	<b>282 - 304</b>	°C	-
Zone 3	<b>293 - 316</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Release agent

**Certifications**

Food contact, Food approval FDA 21 CFR

**Regional Availability**

North America