

PRL PC-FR1A-D-(color)-3

PC

Polymer Resources, Ltd.

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

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, U.V. stabilized or stable to weather

Delivery form

Pellets

Regional Availability

North America