

Diamond Pc 1212 FR0 Black 1819

Polycarbonate
LyondellBasell Industries
Engineering Plastics

General			
Additive	• Flame Retardant		
Features	• Flame Retardant		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.21	1.21 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (300°C/1.2 Kg)	12 g/10 min	12 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, Injection Molded ²	9000 psi	62.1 MPa	
Break, Injection Molded	8300 psi	57.2 MPa	
Flexural Modulus ³	310000 psi	2140 MPa	ASTM D790B
Flexural Strength ³ (Yield)	13100 psi	90.3 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 In (3.18 Mm))	12 ft·lb/in	640 J/m	ASTM D256A
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed, 0.125 In (3.18 Mm)	279 °F	137 °C	
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	270 °F	132 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 In (1.5 Mm)	V-0	V-0	
0.10 In (2.5 Mm)	5VA	5VA	



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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature - Desiccant Dryer	220 to 240 °F	104 to 116 °C
Drying Time - Desiccant Dryer	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Hopper Temperature	480 to 540 °F	249 to 282 °C
Rear Temperature	500 to 560 °F	260 to 293 °C
Middle Temperature	500 to 560 °F	260 to 293 °C
Front Temperature	500 to 560 °F	260 to 293 °C
Nozzle Temperature	500 to 560 °F	260 to 293 °C
Mold Temperature	160 to 220 °F	71 to 104 °C
Injection Pressure	12000 to 15000 psi	82.7 to 103 MPa

Notes

- ¹ Procedure A
- ² 2.0 in/min (51 mm/min)
- ³ Method I (3 point load), 0.050 in/min (1.3 mm/min)

Notes

These are typical property values not to be construed as specification limits.

