

DPS DYN-RPC1215 BK

Polycarbonate
Dynamic Polymer Solutions

Technical Data				
Product Description				
Polycarbonate, 12 izod impact, 15 melt black Produced with recycled content				
General				
Material Status	• Commercial: Active			
Literature ¹	• Technical Datasheet (English)			
Availability	• North America			
Recycled Content	• Yes			
Appearance	• Black			
Processing Method	• Injection Molding			
Physical		Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity				
--		1.20	1.20 g/cm³	ASTM D792
73°F (23°C)		1.20 g/cm³	1.20 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)		15 g/10 min	15 g/10 min	ASTM D1238 ISO 1133
Mechanical		Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus				
-- ³		315000 psi	2170 MPa	ASTM D638
--		314000 psi	2170 MPa	ISO 527-1/10
Tensile Strength				
Yield ⁴		9010 psi	62.1 MPa	ASTM D638
Yield		8850 psi	61.0 MPa	ISO 527-2/50
Tensile Elongation				
Break ⁴		130 %	130 %	ASTM D638
Break		110 %	110 %	ISO 527-2/50
Flexural Modulus ⁵				
--		339000 psi	2340 MPa	ASTM D790
--		3.19E+6 psi	22000 MPa	ISO 178
Flexural Strength ⁵				
--		14000 psi	96.5 MPa	ASTM D790
--		13100 psi	90.0 MPa	ISO 178
Impact		Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))		24 ft·lb/in²	50 kJ/m²	ISO 179
Notched Izod Impact				
73°F (23°C)		13 ft·lb/in	690 J/m	ASTM D256
73°F (23°C)		37 ft·lb/in²	78 kJ/m²	ISO 180
Thermal		Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load				
66 psi (0.45 MPa), Unannealed		270 °F	132 °C	ASTM D648
66 psi (0.45 MPa), Unannealed		264 °F	129 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed		253 °F	123 °C	ASTM D648
264 psi (1.8 MPa), Unannealed		248 °F	120 °C	ISO 75-2/A

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 230 °F	80 to 110 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	< 0.050 %	< 0.050 %
Processing (Melt) Temp	500 to 536 °F	260 to 280 °C
Mold Temperature	140 to 176 °F	60 to 80 °C
Injection Rate	Moderate	Moderate
Back Pressure	90.0 to 130 psi	0.621 to 0.896 MPa

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² Typical properties: these are not to be construed as specifications.
- ³ 0.39 in/min (10 mm/min)
- ⁴ 2.0 in/min (50 mm/min)
- ⁵ 0.20 in/min (5.0 mm/min)

