

DPS DYN-RPC1225 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)	25 g/10 min	25 g/10 min	ASTM D1238 ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	308000 psi	2120 MPa	ASTM D638
--	307000 psi	2120 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	8380 psi	57.7 MPa	ASTM D638
Yield	8270 psi	57.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	75 %	75 %	ASTM D638
Break	80 %	80 %	ISO 527-2/50
Flexural Modulus ⁵			
--	335000 psi	2310 MPa	ASTM D790
--	3.13E+6 psi	21600 MPa	ISO 178
Flexural Strength ⁵			
--	13500 psi	93.1 MPa	ASTM D790
--	12800 psi	88.0 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)	12 ft·lb/in	640 J/m	ASTM D256
73°F (23°C)	34 ft·lb/in²	72 kJ/m²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	268 °F	131 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	262 °F	128 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	248 °F	120 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	243 °F	117 °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)

