

DPS DYN-RPCABS105 BK

Polycarbonate + ABS
Dynamic Polymer Solutions

Technical Data			
Product Description			
Polycarbonate+ABS alloy, 10 izod impact, 5 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			
--	1.14	1.14 g/cm³	ASTM D792
73°F (23°C)	1.14 g/cm³	1.14 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238 ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/10
Tensile Strength			
Yield ³	7790 psi	53.7 MPa	ASTM D638
Yield	7690 psi	53.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ³	80 %	80 %	ASTM D638
Break	60 %	60 %	ISO 527-2/50
Flexural Modulus ⁴			
--	365000 psi	2520 MPa	ASTM D790
--	334000 psi	2300 MPa	ISO 178
Flexural Strength ⁴			
--	13200 psi	91.0 MPa	ASTM D790
--	10900 psi	75.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	25 ft·lb/in²	52 kJ/m²	ISO 179
Notched Izod Impact			
73°F (23°C)	10 ft·lb/in	530 J/m	ASTM D256
73°F (23°C)	29 ft·lb/in²	60 kJ/m²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	262 °F	128 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	259 °F	126 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	228 °F	109 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	221 °F	105 °C	ISO 75-2/A

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	104 to 140 °F	40 to 60 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	< 0.050 %	< 0.050 %
Processing (Melt) Temp	482 to 509 °F	250 to 265 °C
Mold Temperature	122 to 158 °F	50 to 70 °C
Injection Rate	Moderate	Moderate
Back Pressure	80.0 to 120 psi	0.552 to 0.827 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 2.0 in/min (50 mm/min)
- ⁴ 0.20 in/min (5.0 mm/min)

