

Technical Data Sheet

QR Resin QR-4000-GF10

Polyphenylene Ether + PS + PA
Engineering Plastics

General			
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Features	• Chemical Resistant	• Good Stiffness	• High Heat Resistance
Automotive Specifications	• CHRYSLER MS-DB-414 CPN3321 Color: DCX Black		
Appearance	• Black	• Colors Available	
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.17	1.17 g/cm ³	ASTM D792
Molding Shrinkage - Flow (0.125 in (3.18 mm))	6.0E-3 in/in	0.60 %	ASTM D955

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	9600 psi	66.2 MPa	ASTM D638
Tensile Elongation (Break)	10 %	10 %	ASTM D638
Flexural Modulus	420000 psi	2900 MPa	ASTM D790
Flexural Strength (Yield)	22000 psi	152 MPa	ASTM D790

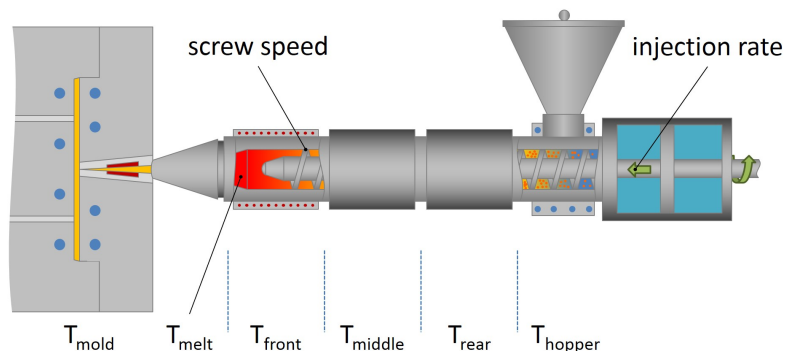
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-20°F (-29°C)	1.0 ft·lb/in	53 J/m	
73°F (23°C)	1.3 ft·lb/in	69 J/m	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	450 °F	232 °C	
264 psi (1.8 MPa), Unannealed	350 °F	177 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	225 °F	107 °C
Drying Time	4.0 to 8.0 hr	4.0 to 8.0 hr
Drying Time, Maximum	8.0 hr	8.0 hr
Rear Temperature	510 to 570 °F	266 to 299 °C
Middle Temperature	520 to 570 °F	271 to 299 °C
Front Temperature	530 to 570 °F	277 to 299 °C
Nozzle Temperature	540 to 570 °F	282 to 299 °C
Processing (Melt) Temp	540 to 570 °F	282 to 299 °C
Mold Temperature	170 to 240 °F	77 to 116 °C

Notes

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