

Technical Data Sheet

QR Resin QR-4100-GF10

Polyphenylene Ether + PS
Engineering Plastics

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Good Stiffness • High Heat Resistance
Appearance	• Black • Colors Available
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.14	1.14 g/cm ³	ASTM D792

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	8500 psi	58.6 MPa	ASTM D638
Tensile Elongation (Break)	5.0 %	5.0 %	ASTM D638
Flexural Modulus	500000 psi	3450 MPa	ASTM D790
Flexural Strength	13500 psi	93.1 MPa	ASTM D790

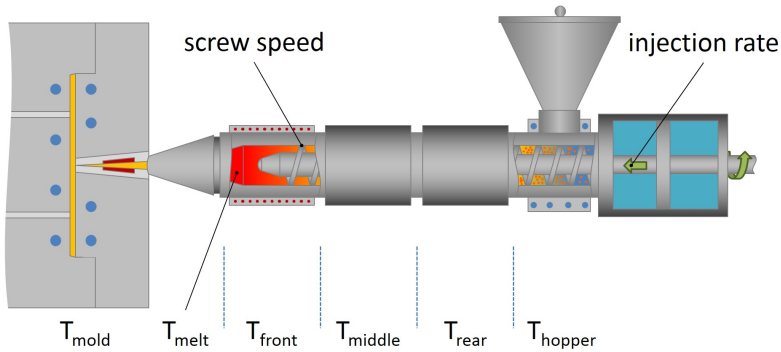
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.4 ft·lb/in	75 J/m	ASTM D256

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	120 °F	48.9 °C	ASTM D648

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	225 °F	107 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Drying Time, Maximum	4.0 hr	4.0 hr
Rear Temperature	510 to 580 °F	266 to 304 °C
Middle Temperature	520 to 590 °F	271 to 310 °C
Front Temperature	560 to 600 °F	293 to 316 °C
Nozzle Temperature	560 to 600 °F	293 to 316 °C
Processing (Melt) Temp	560 to 600 °F	293 to 316 °C
Mold Temperature	170 to 220 °F	77 to 104 °C

Notes

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