Technical Data Sheet

QR Resin QR-4000-(S)

Polyphenylene Ether + PA 66
Engineering Plastics

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Chemical Resistant • Ductile	• Good Dimensional Stability • Good Thermal Stability	• Paintable
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.09	1.09 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (280°C/2.16 kg)	9.0 g/10 min	9.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in (3.18 mm))	0.010 in/in	1.0 %	ASTM D955
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength (Yield)	8000 psi	55.2 MPa	ASTM D638
Tensile Elongation (Break)	50 %	50 %	ASTM D638
Flexural Modulus	300000 psi	2070 MPa	ASTM D790
Flexural Strength (Yield)	12500 psi	86.2 MPa	ASTM D790
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact (73°F (23°C))	1.5 ft·lb/in	80 J/m	ASTM D256
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	310 °F	154 °C	

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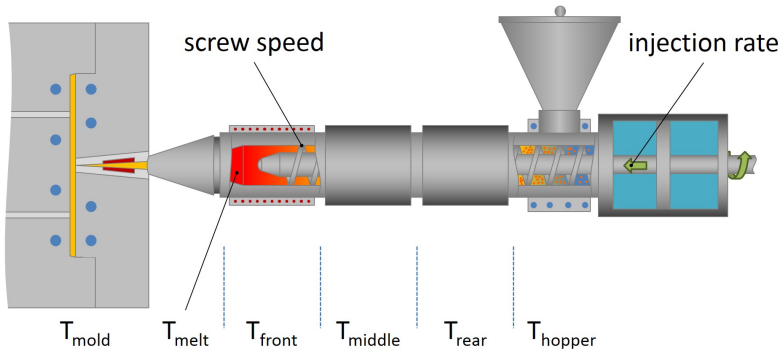

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 to 225 °F	93 to 107 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Drying Time, Maximum	6.0 hr	6.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Rear Temperature	500 to 570 °F	260 to 299 °C
Middle Temperature	510 to 570 °F	266 to 299 °C
Front Temperature	520 to 570 °F	271 to 299 °C
Nozzle Temperature	530 to 570 °F	277 to 299 °C
Processing (Melt) Temp	530 to 570 °F	277 to 299 °C
Mold Temperature	150 to 200 °F	66 to 93 °C

Notes

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