

Technical Data Sheet

QR Resin QR-4165

Polyphenylene Ether + PS
Engineering Plastics

Product Description

Flame Package available as: 94V-0 (0.24")/ 94V-1 (0.0625")

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Flame Retardant • Good Toughness
Appearance	• Black • Grey
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (280°C/2.16 kg)	10 g/10 min	10 g/10 min	ASTM D1238
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)	9000 psi	62.1 MPa	ASTM D638
Flexural Modulus	360000 psi	2480 MPa	ASTM D790
Flexural Strength (Yield)	14000 psi	96.5 MPa	ASTM D790

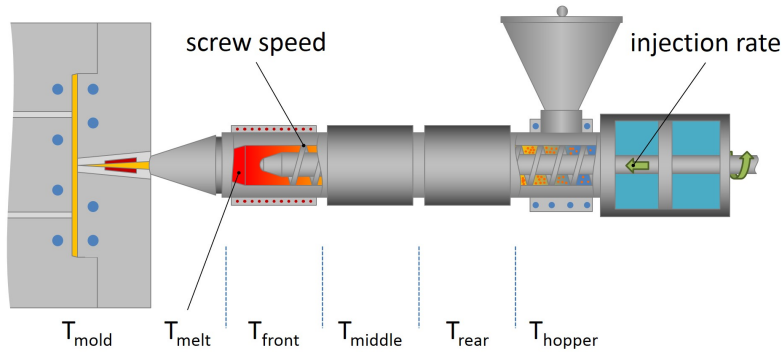
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-20°F (-29°C)	1.8 ft·lb/in	96 J/m	
73°F (23°C)	3.0 ft·lb/in	160 J/m	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	285 °F	141 °C	
264 psi (1.8 MPa), Unannealed	250 °F	121 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	220 to 235 °F	104 to 113 °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	380 to 400 °F	193 to 204 °C
Middle Temperature	420 to 440 °F	216 to 227 °C
Front Temperature	460 to 480 °F	238 to 249 °C
Nozzle Temperature	460 to 480 °F	238 to 249 °C
Processing (Melt) Temp	440 to 480 °F	227 to 249 °C
Mold Temperature	150 to 200 °F	66 to 93 °C

Notes

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