

Technical Data Sheet

QR Resin QR-1000F-GFR20

Polycarbonate
Engineering Plastics

Product Description

Available with UV (V) or Release (R).
Flame Packages Available (0.0625 in min. thickness): 94V-2, 94V-0, 94-5VA

General

Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Features	• Foamable • High Heat Resistance
Appearance	• Colors Available • Natural Color
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.19	1.19 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10 to 20 g/10 min	10 to 20 g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in (3.18 mm))	4.0E-3 in/in	0.40 %	ASTM D955
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	8500 psi	58.6 MPa	ASTM D638
Flexural Modulus	740000 psi	5100 MPa	ASTM D790
Flexural Strength (Yield)	15200 psi	105 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Unnotched Izod Impact (73°F (23°C))	8.0 ft·lb/in	430 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	290 °F	143 °C	
264 psi (1.8 MPa), Unannealed	275 °F	135 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	3.0 to 6.0 hr	3.0 to 6.0 hr
Drying Time, Maximum	6.0 hr	6.0 hr
Rear Temperature	550 to 600 °F	288 to 316 °C
Middle Temperature	570 to 620 °F	299 to 327 °C
Front Temperature	590 to 630 °F	310 to 332 °C
Nozzle Temperature	590 to 620 °F	310 to 327 °C
Processing (Melt) Temp	590 to 630 °F	310 to 332 °C
Mold Temperature	200 to 250 °F	93 to 121 °C

Notes

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