

Technical Data Sheet

QR Resin QR-5020

Polyether Imide + PC
Engineering Plastics

Product Description

QR-5020 is available with Release (R)

General

Additive	• Mold Release
Features	• Chemical Resistant • Good Mold Release • Good Toughness • High Heat Resistance
Appearance	• Colors Available • Natural Color
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.27	1.27 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)	20 g/10 min	20 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)	15000 psi	103 MPa	ASTM D638
Flexural Modulus	460000 psi	3170 MPa	ASTM D790
Flexural Strength (Yield)	20000 psi	138 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	0.80 ft·lb/in	43 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	402 °F	206 °C	
264 psi (1.8 MPa), Unannealed	380 °F	193 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	300 °F	149 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Drying Time, Maximum	6.0 hr	6.0 hr
Rear Temperature	610 to 650 °F	321 to 343 °C
Middle Temperature	620 to 670 °F	327 to 354 °C
Front Temperature	650 to 700 °F	343 to 371 °C
Nozzle Temperature	640 to 680 °F	338 to 360 °C
Processing (Melt) Temp	650 to 700 °F	343 to 371 °C
Mold Temperature	270 to 320 °F	132 to 160 °C

Notes

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