

Technical Data Sheet

Qr Resin QR-5000-GF20

Polyether Imide
LyondellBasell Industries
Engineering Plastics

General			
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Chemical Resistant • High Heat Resistance	• High Stiffness • High Strength	
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.41	1.41 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (337°C/6.6 Kg)	7.0 g/10 min	7.0 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	19000 psi	131 MPa	ASTM D638
Flexural Modulus	790000 psi	5450 MPa	ASTM D790
Flexural Strength (Yield)	30000 psi	207 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.2 ft·lb/in	64 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	409 °F	209 °C	
264 Psi (1.8 Mpa), Unannealed	406 °F	208 °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	650 to 690 °F	343 to 366 °C
Middle Temperature	670 to 710 °F	354 to 377 °C
Front Temperature	690 to 730 °F	366 to 388 °C
Nozzle Temperature	680 to 720 °F	360 to 382 °C
Processing (Melt) Temp	690 to 730 °F	366 to 388 °C
Mold Temperature	275 to 325 °F	135 to 163 °C

Notes

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