Technical Data Sheet

Qr Resin QR-1310-GF10

Polycarbonate + Polyester
LyondellBasell Industries
Engineering Plastics

Product Description
QR-1310-GF10 is a 10% glass fiber filled PC/Polyester injection molding grade that is UV stabilized and contains a release agent. It has improved chemical resistance and good stiffness.

General			
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight		
Features	• Chemical Resistant • Good Mold Release	• Good Stiffness • UV Stabilized	
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.28	1.27 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (260°c/5.0 Kg)	11 g/10 min	11 g/10 min	ASTM D1238
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength [1] (Yield)	9600 psi	66.2 MPa	ASTM D638
Flexural Modulus - 1% Secant [2]	526000 psi	3620 MPa	ASTM D790
Flexural Strength [2] (Yield)	16200 psi	112 MPa	ASTM D790
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256
-4°f (-20°c)	2.1 ft·lb/in	110 J/m	
73°f (23°c)	3.1 ft·lb/in	170 J/m	
Unnotched Izod Impact (73°f (23°c))	18 ft·lb/in	950 J/m	ASTM D4812
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed, 0.126 In (3.20 Mm)	261 °F	127 °C	
66 Psi (0.45 Mpa), Unannealed, 0.252 In (6.40 Mm)	267 °F	131 °C	
264 Psi (1.8 Mpa), Unannealed, 0.126 In (3.20 Mm)	227 °F	108 °C	
264 Psi (1.8 Mpa), Unannealed, 0.252 In (6.40 Mm)	247 °F	119 °C	
Vicat Softening Temperature			
--	298 °F	148 °C	ASTM D1525 [3]
--	254 °F	123 °C	ASTM D1525 [4]

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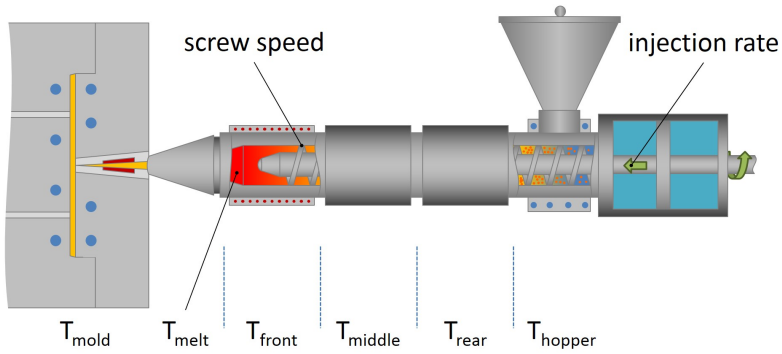

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 °F	93 °C
Drying Time	4.0 to 8.0 hr	4.0 to 8.0 hr
Drying Time, Maximum	8.0 hr	8.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Rear Temperature	485 to 510 °F	252 to 266 °C
Middle Temperature	485 to 530 °F	252 to 277 °C
Front Temperature	490 to 540 °F	254 to 282 °C
Nozzle Temperature	475 to 530 °F	246 to 277 °C
Processing (Melt) Temp	510 to 530 °F	266 to 277 °C
Mold Temperature	160 to 200 °F	71 to 93 °C

Notes

[1] 0.20 in/min (5.0 mm/min)

[2] 0.051 in/min (1.3 mm/min)

[3] Rate A (50°C/h), Loading 1 (10 N)

[4] Rate A (50°C/h), Loading 2 (50 N)