Technical Data Sheet

Qr Resin QR-1221-IM

Polycarbonate + ABS
LyondellBasell Industries
Engineering Plastics

Product Description
QR-1221-IM is an injection molding grade of PC/ABS that has high gloss and can be colored. Common applications include interior automotive, lawn & garden, and agricultural parts.

General		
Features	• Good Flow	• High Gloss
Appearance	• Colors Available	• Natural Color
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density (73°f (23°c))	1.14 g/cm³	1.14 g/cm³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (260°c/5.0 Kg)	16 g/10 min	16 g/10 min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	342000 psi	2360 MPa	ISO 527-1/1
Tensile Stress			ISO 527
Yield [1]	3380 psi	23.3 MPa	
Yield [2]	9250 psi	63.8 MPa	
Tensile Strain (Break)	140 %	140 %	ISO 527-2
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1
-22°f (-30°c)	21 ft·lb/in²	44 kJ/m²	
73°f (23°c)	68 ft·lb/in²	140 kJ/m²	
Multi-Axial Instrumented Impact Energy [3]			ASTM D3763
-22°f (-30°c), Total Penetration Energy, Brittle Failure	49.3 ft·lb	66.9 J	
73°f (23°c), Total Penetration Energy, Ductile Failure	46.2 ft·lb	62.6 J	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/A
264 Psi (1.8 Mpa), Unannealed	221 °F	105 °C	
Vicat Softening Temperature			
--	253 °F	123 °C	ISO 306/B120
--	246 °F	119 °C	ISO 306/B50
CLTE			ISO 11359-2
Flow	3.7E-5 in/in/°F	6.7E-5 cm/cm/°C	
Transverse	4.4E-5 in/in/°F	8.0E-5 cm/cm/°C	

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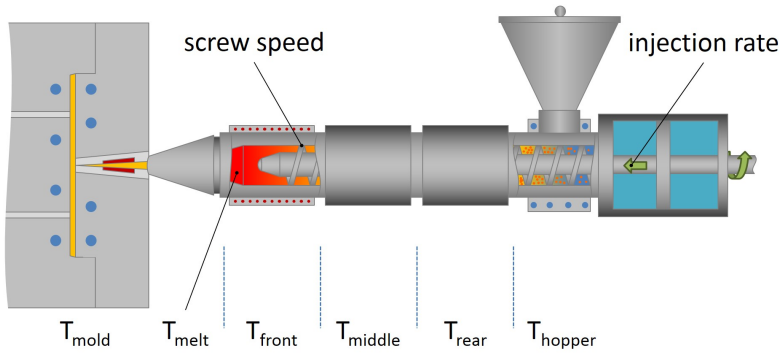

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	225 °F	107 °C
Drying Time	4.0 to 8.0 hr	4.0 to 8.0 hr
Drying Time, Maximum	8.0 hr	8.0 hr
Rear Temperature	475 to 540 °F	246 to 282 °C
Middle Temperature	480 to 550 °F	249 to 288 °C
Front Temperature	500 to 550 °F	260 to 288 °C
Nozzle Temperature	500 to 550 °F	260 to 288 °C
Processing (Melt) Temp	500 to 550 °F	260 to 288 °C
Mold Temperature	140 to 200 °F	60 to 93 °C

Notes

[1] 0.039 in/min (1 mm/min)

[2] 2.0 in/min (50 mm/min)

[3] 21.7 ft/sec (6.6 m/sec)

Notes

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