

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

Material Status	• Commercial: Active
Availability	• North America
Features	• Good Flow • High Gloss
Appearance	• Colors Available • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

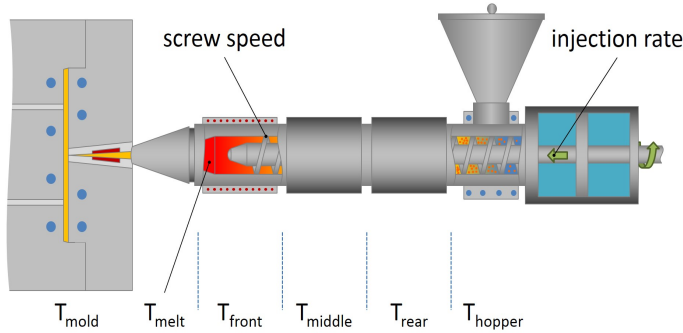
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density (73°F (23°C))	1.14 g/cm ³	1.14 g/cm ³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	16 g/10 min	16 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	342000 psi	2360 MPa	ISO 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/in ²	44 kJ/m ²	
73°F (23°C)	68 ft·lb/in ²	140 kJ/m ²	
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	

Technical Data Sheet



Qr Resin QR-1221-IM

Polycarbonate + ABS
LyondellBasell Industries
Engineering Plastics



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

Technical Data Sheet

**Qr Resin QR-1221-IM**

Polycarbonate + ABS
LyondellBasell Industries
Engineering Plastics

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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2024

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.