

QR Resin QR-1220IM

PC

LyondellBasell Industries

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|---------|---------------|
| ASTM Data | | | |
| Melt Flow Index, MFI | 20 | g/10min | ASTM D 1238 |
| Temperature | 260 | °C | - |
| Load | 5 | kg | - |
| Mold Shrinkage, MD | 0.006 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2340 | MPa | ISO 527 |
| Yield stress | 54.5 | MPa | ISO 527 |
| Yield strain | 3.4 | % | ISO 527 |
| Stress at break | 52 | MPa | ISO 527 |
| Strain at break | 100 | % | ISO 527 |
| Flexural modulus, 23°C | 2560 | MPa | ISO 178 |
| Flexural strength | 90 | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | 46 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 33 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, +23°C | 47 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 37 | kJ/m ² | ISO 180/1A |
| Temperature | -30 | °C | - |
| ASTM Data | | | |
| Tensile Strength at Yield | 52 | MPa | ASTM D 638 |
| Elongation at Yield | 150 | % | ASTM D 638 |
| Flexural Modulus | 2250 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 530 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 430 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 104 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 122 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| Coefficient of Thermal Expansion, MD | 75 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 76 | E-6/K | ASTM D 696 |
| DTUL @ 264 psi | 104 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------|-------------------|---------------|
| Density | 1140 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 74 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Melt temperature | 249 - 260 | °C | - |
| Mold temperature | 38 - 71 | °C | - |
| Zone 1 | 227 - 254 | °C | - |
| Zone 2 | 243 - 271 | °C | - |
| Zone 3 | 243 - 271 | °C | - |
| Nozzle temperature | 243 - 271 | °C | - |

Characteristics**Processing**

Injection Molding

Special Characteristics

High impact or impact modified

Delivery form

Pellets, Black, Natural Color

Regional Availability

North America