

## Qr Resin QR-3000

Polyethylene Terephthalate

LyondellBasell Industries

Engineering Plastics

| General           |                      |                    |                 |
|-------------------|----------------------|--------------------|-----------------|
| Features          | • Chemical Resistant | • Semi Crystalline |                 |
| Appearance        | • Black              | • Colors Available | • Natural Color |
| Forms             | • Pellets            |                    |                 |
| Processing Method | • Injection Molding  |                    |                 |

| Physical                          | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|-----------------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity        | 1.30                    | 1.30 g/cm <sup>3</sup> | ASTM D792   |
| Mechanical                        | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Tensile Strength (Yield)          | 7000 psi                | 48.3 MPa               | ASTM D638   |
| Flexural Modulus                  | 300000 psi              | 2070 MPa               | ASTM D790   |
| Flexural Strength (Break)         | 12000 psi               | 82.7 MPa               | ASTM D790   |
| Impact                            | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Notched Izod Impact (73°F (23°C)) | 1.0 ft·lb/in            | 53 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     | 150 °F                  | 65.6 °C                |             |
| 264 Psi (1.8 Mpa), Unannealed     | 140 °F                  | 60.0 °C                |             |



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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 250 °F                  | 121 °C             |
| Drying Time            | 3.0 to 8.0 hr           | 3.0 to 8.0 hr      |
| Drying Time, Maximum   | 8.0 hr                  | 8.0 hr             |
| Rear Temperature       | 460 to 490 °F           | 238 to 254 °C      |
| Middle Temperature     | 470 to 500 °F           | 243 to 260 °C      |
| Front Temperature      | 480 to 510 °F           | 249 to 266 °C      |
| Nozzle Temperature     | 470 to 500 °F           | 243 to 260 °C      |
| Processing (Melt) Temp | 480 to 510 °F           | 249 to 266 °C      |
| Mold Temperature       | 150 to 190 °F           | 66 to 88 °C        |

Notes

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

