

## Technical Data Sheet

**Qr Resin QR-1805IMLM**

Polycarbonate + Polyester  
LyondellBasell Industries  
Engineering Plastics

**General**

|                   |                      |                          |                 |
|-------------------|----------------------|--------------------------|-----------------|
| Material Status   | • Commercial: Active |                          |                 |
| Availability      | • North America      |                          |                 |
| Features          | • Chemical Resistant | • Good Impact Resistance | • Low Flow      |
| Appearance        | • Black              | • Colors Available       | • Natural Color |
| Forms             | • Pellets            |                          |                 |
| Processing Method | • Injection Molding  |                          |                 |

| Physical                                                           | Nominal Value (English) | Nominal Value (SI)      | Test Method |
|--------------------------------------------------------------------|-------------------------|-------------------------|-------------|
| Density / Specific Gravity                                         | 1.00                    | 0.998 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (266°C/5.0 kg)                           | 8.0 g/10 min            | 8.0 g/10 min            | ASTM D1238  |
| Mechanical                                                         | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Tensile Strength (Yield)                                           | 8150 psi                | 56.2 MPa                | ASTM D638   |
| Tensile Elongation (Break)                                         | 160 %                   | 160 %                   | ASTM D638   |
| Flexural Modulus                                                   | 297000 psi              | 2050 MPa                | ASTM D790   |
| Flexural Strength (Yield)                                          | 11600 psi               | 80.0 MPa                | ASTM D790   |
| Impact                                                             | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Notched Izod Impact (73°F (23°C))                                  | 15 ft·lb/in             | 800 J/m                 | ASTM D256   |
| Thermal                                                            | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Deflection Temperature Under Load<br>264 psi (1.8 MPa), Unannealed | 232 °F                  | 111 °C                  | ASTM D648   |

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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 230 °F                  | 110 °C             |
| Drying Time            | 4.0 to 6.0 hr           | 4.0 to 6.0 hr      |
| Drying Time, Maximum   | 6.0 hr                  | 6.0 hr             |
| Suggested Max Moisture | 0.02 %                  | 0.02 %             |
| Rear Temperature       | 470 to 510 °F           | 243 to 266 °C      |
| Middle Temperature     | 480 to 520 °F           | 249 to 271 °C      |
| Front Temperature      | 490 to 530 °F           | 254 to 277 °C      |
| Nozzle Temperature     | 490 to 520 °F           | 254 to 271 °C      |
| Processing (Melt) Temp | 500 to 530 °F           | 260 to 277 °C      |
| Mold Temperature       | 150 to 190 °F           | 66 to 88 °C        |

## 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/>.

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