



# Diamond QR-2005IM(D)-BK

## LyondellBasell Industries - Acrylonitrile Butadiene Styrene

### General Information

#### Product Description

Available with either high or low gloss.

#### General

|                   |                          |
|-------------------|--------------------------|
| Features          | • High Impact Resistance |
| Appearance        | • Colors Available       |
| Forms             | • Pellets                |
| Processing Method | • Injection Molding      |

### Properties<sup>1</sup>

| Physical   | Nominal Value | Unit     | Test Method |
|--|---------------|----------|-------------|
| Density / Specific Gravity                               | 1.04          |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)                 | 5.0           | g/10 min | ASTM D1238  |
| Mechanical   | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield)                                 | 6400          | psi      | ASTM D638   |
| Flexural Modulus   | 339000        | psi      | ASTM D790   |
| Flexural Strength (Yield)                                | 10500         | psi      | ASTM D790   |
| Impact   | Nominal Value | Unit     | Test Method |
| Notched Izod Impact                                      |               |          | ASTM D256   |
| -40°F  | 1.2           | ft-lb/in |             |
| 73°F   | 6.9           | ft-lb/in |             |
| Thermal  | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)   | 200           | °F       | ASTM D648   |
| Deflection Temperature Under Load<br>264 psi, Unannealed | 185           | °F       | ASTM D648   |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 199           | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Drying Time, Maximum   | 4.0           | hr   |
| Rear Temperature       | 370 to 410    | °F   |
| Middle Temperature     | 399 to 441    | °F   |
| Front Temperature      | 421 to 460    | °F   |
| Nozzle Temperature     | 421 to 500    | °F   |
| Processing (Melt) Temp | 421 to 500    | °F   |
| Mold Temperature       | 120 to 160    | °F   |