

Technical Data Sheet

# Gapex RPP20EA06HB-BK

Polypropylene Homopolymer  
LyondellBasell Industries  
Engineering Plastics

| General                |   |
|------------------------|---|
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight                                     |
| Features               | • Chemically Coupled • Homopolymer<br>• Creep Resistant • Low Shrinkage |
| Uses                   | • Automotive Applications   |
| Appearance             | • Black   |
| Forms                  | • Pellets   |
| Processing Method      | • Injection Molding   |

| Physical                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|---|-------------------------|------------------------|-------------|
| Density / Specific Gravity                | 1.05                    | 1.05 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg) | 5.0 g/10 min            | 5.0 g/10 min           | ASTM D1238  |
| Mechanical                                | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Tensile Strength (73°F (23°C))            | 8700 psi                | 60.0 MPa               | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C))   | 5.0 %                   | 5.0 %                  | ASTM D638   |
| Flexural Modulus                          |                         |                        | ASTM D790   |
| 1% Secant : 73°F (23°C)                   | 526000 psi              | 3630 MPa               |             |
| Tangent : 73°F (23°C)                     | 550000 psi              | 3790 MPa               |             |
| Flexural Strength (73°F (23°C))           | 13300 psi               | 91.7 MPa               | ASTM D790   |
| Impact                                    | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Notched Izod Impact (73°F (23°C))         | 1.1 ft·lb/in            | 59 J/m                 | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C))       | 6.5 ft·lb/in            | 350 J/m                | ASTM D4812  |
| Gardner Impact                            |                         |                        | ASTM D5420  |
| 0.125 In (3.18 Mm)                        | 2.00 in·lb              | 0.226 J                |             |
| 73°F (23°C)                               | 3.00 in·lb              | 0.339 J                |             |
| Hardness                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Durometer Hardness (Shore D)              | 72                      | 72                     | ASTM D2240  |
| Thermal                                   | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Deflection Temperature Under Load         |                         |                        | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed             | 315 °F                  | 157 °C                 |             |
| 264 Psi (1.8 Mpa), Unannealed             | 290 °F                  | 143 °C                 |             |

**Additional Information**  
 The value listed as Unnotched Izod Impact, ASTM D256, was tested in accordance with ASTM D4812.  
 Filler Content, ASTM D2584: 20.0%  
 Testing and measurements were performed at 73 +/-3°F and 50 +/-5% relative humidity unless otherwise noted.

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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 160 to 180 °F           | 71 to 82 °C        |
| Drying Time            | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Rear Temperature       | 430 to 460 °F           | 221 to 238 °C      |
| Middle Temperature     | 440 to 470 °F           | 227 to 243 °C      |
| Front Temperature      | 450 to 500 °F           | 232 to 260 °C      |
| Nozzle Temperature     | 450 to 500 °F           | 232 to 260 °C      |
| Processing (Melt) Temp | 430 to 460 °F           | 221 to 238 °C      |
| Mold Temperature       | 100 to 150 °F           | 38 to 66 °C        |
| Injection Rate         | Slow-Moderate           | Slow-Moderate      |
| Back Pressure          | 20.0 to 50.0 psi        | 0.138 to 0.345 MPa |
| Cushion                | 0.200 to 0.500 in       | 5.08 to 12.7 mm    |

**Notes**

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