

Technical Data Sheet

# Gapex RPP10EA02BK

Polypropylene Homopolymer  
LyondellBasell Industries  
Engineering Plastics

| General                                                                                                     |                                     |                         |             |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------|-------------|
| Filler / Reinforcement                                                                                      | • Glass Fiber, 10% Filler by Weight |                         |             |
| Features                                                                                                    | • Chemically Coupled                |                         |             |
| Forms                                                                                                       | • Pellets                           |                         |             |
| Physical                                                                                                    | Nominal Value (English)             | Nominal Value (SI)      | Test Method |
| Density / Specific Gravity                                                                                  | 0.980                               | 0.978 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg)                                                                   | 3.2 g/10 min                        | 3.2 g/10 min            | ASTM D1238  |
| Mechanical                                                                                                  | Nominal Value (English)             | Nominal Value (SI)      | Test Method |
| Tensile Strength (73°F (23°C))                                                                              | 6600 psi                            | 45.5 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)                                                                                     | 322000 psi                          | 2220 MPa                |             |
| Tangent : 73°F (23°C)                                                                                       | 340000 psi                          | 2340 MPa                |             |
| Flexural Strength (73°F (23°C))                                                                             | 9900 psi                            | 68.3 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   |
| Unnotched Izod Impact (73°F (23°C))                                                                         | 6.5 ft·lb/in                        | 350 J/m                 | ASTM D4812  |
| Gardner Impact (73°F (23°C))                                                                                | 3.50 in·lb                          | 0.395 J                 | ASTM D5420  |
| Thermal                                                                                                     | Nominal Value (English)             | Nominal Value (SI)      | Test Method |
| Deflection Temperature Under Load                                                                           |                                     |                         | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed                                                                               | 300 °F                              | 149 °C                  |             |
| 264 Psi (1.8 Mpa), Unannealed                                                                               | 250 °F                              | 121 °C                  |             |
| Additional Information                                                                                      |                                     |                         |             |
| Testing and measurements were performed at 73 +/-3°F and 50 +/-5% relative humidity unless otherwise noted. |                                     |                         |             |

Technical Data Sheet

## Gapex RPP10EA02BK

Polypropylene Homopolymer  
LyondellBasell Industries  
Engineering Plastics



| 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.