

# Gapex RPP20EU38BK

Polypropylene  
LyondellBasell Industries  
Engineering Plastics

| General                |                                     |                   |
|------------------------|-------------------------------------|-------------------|
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight |                   |
| Additive               | • Impact Modifier                   |                   |
| Features               | • Chemically Coupled                | • Impact Modified |
| Forms                  | • Pellets                           |                   |

| 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) | 16 g/10 min             | 16 g/10 min            | ASTM D1238  |

| Mechanical                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (73°F (23°C))          | 9100 psi                | 62.7 MPa           | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C)) | 4.0 %                   | 4.0 %              | ASTM D638   |
| Flexural Modulus                        |                         |                    | ASTM D790   |
| 1% Secant : 73°F (23°C)                 | 549000 psi              | 3790 MPa           |             |
| Tangent : 73°F (23°C)                   | 565000 psi              | 3900 MPa           |             |
| Flexural Strength (73°F (23°C))         | 13900 psi               | 95.8 MPa           | ASTM D790   |

| Impact                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-------------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact (73°F (23°C))   | 1.2 ft·lb/in            | 64 J/m             | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C)) | 8.0 ft·lb/in            | 430 J/m            | ASTM D4812  |
| Gardner Impact (73°F (23°C))        | 2.50 in·lb              | 0.282 J            | ASTM D5420  |

| 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     | 295 °F                  | 146 °C             |             |

## Additional Information

The value listed as Unnotched Izod Impact, ASTM D256, was tested in accordance with ASTM D4812.

Filler Content, ASTM D2584: 20.5%

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.

