

# Gapex RPP20EB09UL NATURAL

Polypropylene Homopolymer

LyondellBasell Industries

Engineering Plastics

| General                |                                     |  |  |
|------------------------|-------------------------------------|--|--|
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight |  |  |
| Features               | • Chemically Coupled                |  |  |
| Appearance             | • Natural Color                     |  |  |
| Forms                  | • Pellets                           |  |  |

  

| Physical                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|-------------------------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity                | 1.04                    | 1.04 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg) | 4.5 g/10 min            | 4.5 g/10 min           | ASTM D1238  |

  

| Mechanical                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (73°F (23°C))          | 10500 psi               | 72.4 MPa           | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C)) | 4.5 %                   | 4.5 %              | ASTM D638   |
| Flexural Modulus                        |                         |                    | ASTM D790   |
| 1% Secant : 73°F (23°C)                 | 575000 psi              | 3960 MPa           |             |
| Tangent : 73°F (23°C)                   | 590000 psi              | 4070 MPa           |             |
| Flexural Strength (73°F (23°C))         | 14900 psi               | 103 MPa            | ASTM D790   |

  

| Impact                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-------------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact (73°F (23°C))   | 1.4 ft·lb/in            | 75 J/m             | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C)) | 10 ft·lb/in             | 530 J/m            | ASTM D4812  |
| Gardner Impact (73°F (23°C))        | 3.00 in·lb              | 0.339 J            | ASTM D5420  |

  

| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load |                         |                    | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed     | 320 °F                  | 160 °C             |             |
| 264 Psi (1.8 Mpa), Unannealed     | 300 °F                  | 149 °C             |             |

## Additional Information

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.

