

Technical Data Sheet

Gapex RPP10EA78NA

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

| General | | | |
|------------------------|-------------------------------------|--|--|
| Filler / Reinforcement | • Glass Fiber, 10% Filler by Weight | | |
| Features | • Chemically Coupled • Homopolymer | | |
| Forms | • Pellets | | |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|-------------------------|--------------------------|-------------|
| Density / Specific Gravity | 0.0980 | 0.0978 g/cm ³ | 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 (Yield, 73°F (23°C)) | 8000 psi | 55.2 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) | 375000 psi | 2590 MPa | |
| Tangent : 73°F (23°C) | 395000 psi | 2720 MPa | |
| Flexural Strength (Yield, 73°F (23°C)) | 11900 psi | 82.0 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)) | 7.5 ft·lb/in | 400 J/m | ASTM D4812 |
| Gardner Impact | 4.00 in·lb | 0.452 J | ASTM D5420 |

| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 Psi (0.45 Mpa), Unannealed | 305 °F | 152 °C | |
| 264 Psi (1.8 Mpa), Unannealed | 265 °F | 129 °C | |

| Additional Information | | | |
|---------------------------------|--|--|--|
| Filler Content, ASTM D2584: 11% | | | |

Technical Data Sheet

Gapex RPP10EA78NA

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.