

Technical Data Sheet

Gapex RPP40DA

Polypropylene
LyondellBasell Industries
Engineering Plastics

| General | |
|------------------------|-------------------------------------|
| Filler / Reinforcement | • Glass Fiber, 40% Filler by Weight |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity | 1.22 | 1.22 g/cm ³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) | 2.0 g/10 min | 2.0 g/10 min | ASTM D1238 |

| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|----------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (Yield) | 8000 psi | 55.2 MPa | ASTM D638 |
| Tensile Elongation (Break) | 2.0 % | 2.0 % | ASTM D638 |
| Flexural Modulus | 880000 psi | 6070 MPa | ASTM D790 |
| Flexural Strength (Yield) | 12000 psi | 82.7 MPa | ASTM D790 |

| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact | | | ASTM D256 |
| 73°F (23°C), 0.125 In (3.18 Mm) | 1.2 ft·lb/in | 64 J/m | |
| Unnotched Izod Impact | | | ASTM D4812 |
| 73°F (23°C), 0.125 In (3.18 Mm) | 2.0 ft·lb/in | 110 J/m | |
| Gardner Impact | 2.50 in·lb | 0.282 J | ASTM D3029 |

| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
|------------------------------|-------------------------|--------------------|-------------|
| Durometer Hardness (Shore D) | 82 | 82 | ASTM D2240 |

| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 Psi (0.45 Mpa), Unannealed | 295 °F | 146 °C | |
| 264 Psi (1.8 Mpa), Unannealed | 285 °F | 141 °C | |

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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.