

Technical Data Sheet

Gapex RPP10ER

Polypropylene
LyondellBasell Industries
Engineering Plastics

General	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Good Impact Resistance
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.970	0.968 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)	3.0 g/10 min	3.0 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	5100 psi	35.2 MPa	ASTM D638
Tensile Elongation (Break)	12 %	12 %	ASTM D638
Flexural Modulus	320000 psi	2210 MPa	ASTM D790
Flexural Strength (Yield)	7500 psi	51.7 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 In (3.18 Mm)	1.7 ft·lb/in	91 J/m	ASTM D256
Unnotched Izod Impact 73°F (23°C), 0.125 In (3.18 Mm)	8.0 ft·lb/in	430 J/m	ASTM D4812
Gardner Impact	12.0 in·lb	1.36 J	ASTM D3029

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	70	70	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 Psi (0.45 Mpa), Unannealed	275 °F	135 °C	ASTM D648
264 Psi (1.8 Mpa), Unannealed	190 °F	87.8 °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.