

Technical Data Sheet

Gapex RPP10EA54NA

Polypropylene
LyondellBasell Industries
Engineering Plastics

General	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Additive	• Heat Stabilizer
Features	• Chemically Coupled • Heat Stabilized
Uses	• Automotive Under the Hood
Automotive Specifications	• ASTM D5857 PP114 G10 • CHRYSLER MS-DB-500 CPN4077 Color: Natural
Appearance	• Natural Color
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.980	0.978 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg)	6.8 g/10 min	6.8 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	7370 psi	50.8 MPa	ASTM D638
Tensile Elongation (Break)	7.0 %	7.0 %	ASTM D638
Flexural Modulus - 1% Secant ¹	379000 psi	2610 MPa	ASTM D790
Flexural Strength (73°F (23°C))	7200 psi	49.6 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.0 ft·lb/in	53 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	6.2 ft·lb/in	330 J/m	ASTM D4812
Gardner Impact	6.99 in·lb	0.790 J	ASTM D3029
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	71	71	ASTM D2240
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	257 °F	125 °C	

Additional Information

The value listed as Unnotched Izod Impact, ASTM D256, was tested in accordance with ASTM D4812.
Tensile Retention, 500 hrs, 150°C, ASTM D573: 52 hrs.

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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

¹ 0.051 in/min (1.3 mm/min)

Notes

These are typical property values not to be construed as specification limits.