

Technical Data Sheet

Gapex RPP30EA16NA

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

General			
Filler / Reinforcement	• Glass Fiber, 31% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Chemically Coupled	• Heat Stabilized	• Homopolymer
Uses	• Automotive Applications	• Automotive Under the Hood	
Automotive Specifications	• ASTM D5857 PP114 G30 Z1	• CHRYSLER MS-DB-500 CPN3581 Color: Natural	• FORD WSB-M4D732-A3
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.15	1.15 g/cm³	ASTM D792
--	1.13 g/cm³	1.13 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)			
230°C/2.16 Kg	3.0 g/10 min	3.0 g/10 min	ASTM D1238
230°C/2.16 Kg	3.5 g/10 min	3.5 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			
Yield	12000 psi	82.7 MPa	ASTM D638
Yield, 73°F (23°C)	12000 psi	82.8 MPa	ISO 527-2
Tensile Elongation (Break)	6.0 %	6.0 %	ASTM D638
Flexural Modulus			
--	610000 psi	4210 MPa	ASTM D790
--	754000 psi	5200 MPa	ISO 178
Flexural Strength (Yield)	17000 psi	117 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			
73°F (23°C)	1.6 ft·lb/in	85 J/m	ASTM D256
-40°F (-40°C)	2.6 ft·lb/in²	5.5 kJ/m²	ISO 180
73°F (23°C)	3.8 ft·lb/in²	8.0 kJ/m²	ISO 180
Unnotched Izod Impact (73°F (23°C))	12 ft·lb/in	640 J/m	ASTM D4812
Gardner Impact	5.00 in·lb	0.565 J	ASTM D3029

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	75	75	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	325 °F	163 °C	ASTM D648
66 Psi (0.45 Mpa), Unannealed	316 °F	158 °C	ISO 75-2/B
264 Psi (1.8 Mpa), Unannealed	300 °F	149 °C	ASTM D648
264 Psi (1.8 Mpa), Unannealed	302 °F	150 °C	ISO 75-2/A

Additional Information			
Tensile/Izod Change, 1,000 hrs @ 140°C, ISO 188: +10/-2			

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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.