

Technical Data Sheet

Gapex RPP20EA11BK

Polypropylene Homopolymer

LyondellBasell Industries

Engineering Plastics

General		
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight	
Features	• Chemically Coupled	
Uses	• Automotive Applications	• Automotive Under the Hood
Automotive Specifications	• ASTM D5857 PP114 G20 Z1	• CHRYSLER MS-DB-500 CPN3575 Color: Black
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg)	6.0 g/10 min	6.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	9400 psi	64.8 MPa	ASTM D638
Tensile Elongation (Break, 73°F (23°C))	4.0 %	4.0 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°F (23°C) ¹	531000 psi	3660 MPa	
Tangent : 73°F (23°C)	545000 psi	3760 MPa	
Flexural Strength (73°F (23°C))	13600 psi	93.8 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.2 ft·lb/in	64 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	8.0 ft·lb/in	430 J/m	ASTM D4812
Gardner Impact	3.00 in·lb	0.339 J	ASTM D5420
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	106	106	ASTM D785
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	287 °F	142 °C	

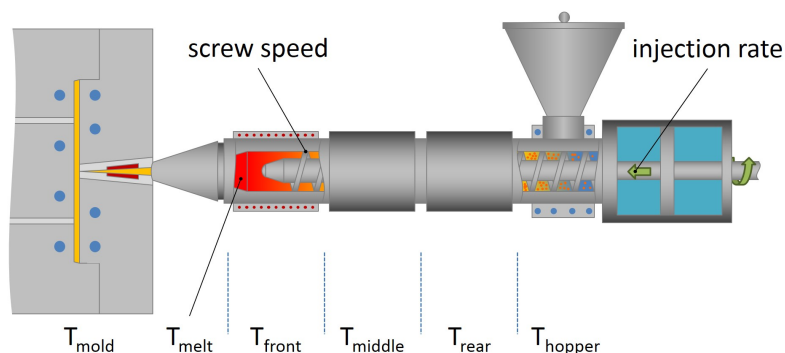
Additional Information

The value listed as Unnotched Izod Impact, ASTM D256, was tested in accordance with ASTM D4812.

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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