

Technical Data Sheet

Gapex RPP30EA18BK

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description

Primary use is for battery tray supports.

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Chemically Coupled	• Heat Stabilized	
Uses	• Support Trays		
Automotive Specifications	• ASTM D5857 PP114 G30 Z1	• CHRYSLER MS-DB-500 CPN3580 Color: Black	• FORD WSB-M4D732-A3
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.13	1.13 g/cm ³	ASTM D792
--	1.14 g/cm ³	1.14 g/cm ³	ISO 1183

Melt Mass-Flow Rate (MFR)			
230°c/2.16 Kg	4.0 g/10 min	4.0 g/10 min	ASTM D1238
230°c/2.16 Kg	3.8 g/10 min	3.8 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Break)	10500 psi	72.4 MPa	ISO 527-2
Tensile Elongation (Break)	4.0 %	4.0 %	ASTM D638
Flexural Modulus	689000 psi	4750 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			
-40°f (-40°c)	0.90 ft·lb/in	48 J/m	ASTM D256
73°f (23°c)	1.2 ft·lb/in	65 J/m	ASTM D256
-40°f (-40°c)	2.3 ft·lb/in ²	4.8 kJ/m ²	ISO 180
73°f (23°c)	3.2 ft·lb/in ²	6.8 kJ/m ²	ISO 180
Unnotched Izod Impact (73°f (23°c))	10 ft·lb/in	530 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)	95	95	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	306 °F	152 °C	ISO 75-2/B
264 Psi (1.8 Mpa), Unannealed	300 °F	149 °C	ASTM D648
264 Psi (1.8 Mpa), Unannealed	282 °F	139 °C	ISO 75-2/A

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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.