

Technical Data Sheet



Gapex RPP40EB81HB BLACK

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Features	• Chemically Coupled
Appearance	• Black
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.23	1.23 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.0 g/10 min	3.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	14500 psi	100 MPa	ASTM D638
Tensile Elongation (Break, 73°F (23°C))	5.0 %	5.0 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°F (23°C)	1.04E+6 psi	7190 MPa	
Tangent : 73°F (23°C)	1.10E+6 psi	7590 MPa	
Flexural Strength (73°F (23°C))	21600 psi	149 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	2.0 ft·lb/in	110 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	12 ft·lb/in	650 J/m	ASTM D4812
Gardner Impact (73°F (23°C))	4.00 in·lb	0.452 J	ASTM D5420
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	325 °F	163 °C	
264 psi (1.8 MPa), Unannealed	310 °F	154 °C	

Additional Information

Testing and measurements were performed at 73 +/-3°F and 50 +/-5% relative humidity unless otherwise noted.

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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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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