

Technical Data Sheet



Polyfort FPP LGF 40 LE

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description

40% long glass fiber reinforced low emission PP Homopolymer

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe
Filler / Reinforcement	• Long Glass Fiber, 40% Filler by Weight
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PP-H LGF 40

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ISO 1183/A
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.45E+6 psi	10000 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	16700 psi	115 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.8 %	1.8 %	ISO 527-2/1A/5
Flexural Modulus ¹	1.19E+6 psi	8200 MPa	ISO 178
Flexural Stress ¹ (2.5% Strain)	23200 psi	160 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	8.1 ft·lb/in ²	17 kJ/m ²	
73°F (23°C)	8.6 ft·lb/in ²	18 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	19 ft·lb/in ²	40 kJ/m ²	
73°F (23°C)	21 ft·lb/in ²	45 kJ/m ²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	325 °F	163 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	316 °F	158 °C	ISO 75-2/Af
Vicat Softening Temperature	293 °F	145 °C	ISO 306/B50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302

Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

Technical Data Sheet



Polyfort FPP LGF 40 LE

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C

Injection Notes

Drying normally not necessary.

Injection molding parameters also influence emission properties, which are often required for automotive interior applications. Generally speaking, the emission, odor and fogging behavior of finished parts is improved by lowering the melt temperature, reducing residence time and avoiding high shear stress.

Technical Data Sheet



Polyfort FPP LGF 40 LE

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Notes

¹ 0.079 in/min (2.0 mm/min)

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/>.

© LyondellBasell Industries Holdings, B.V. 2024

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.