

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

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

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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.