

Technical Data Sheet

Polyfort FPP 40 GFC LE

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description

40 % glass fibre reinforced PP homopolymer, chemically coupled, low emission

General

Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Chemically Coupled	• Homopolymer	• Low Emissions
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.21 g/cm ³	1.21 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 Kg)	4.0 cm ³ /10min	4.0 cm ³ /10min	ISO 1133
Water Absorption			ISO 62

Equilibrium, 73°F (23°C), 50% Rh

0.030 %

0.030 %

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.31E+6 psi	9000 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	14500 psi	100 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.3 %	3.3 %	ISO 527-2/1A/5

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Charpy Notched Impact Strength

ISO 179/1eA

-22°F (-30°C)

3.8 ft·lb/in²

8.0 kJ/m²

73°F (23°C)

4.8 ft·lb/in²

10 kJ/m²

Charpy Unnotched Impact Strength

ISO 179/1eU

-22°F (-30°C)

24 ft·lb/in²

50 kJ/m²

73°F (23°C)

25 ft·lb/in²

52 kJ/m²

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	21300 psi	147 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load

ISO 75-2/Af

264 Psi (1.8 Mpa), Unannealed

297 °F

147 °C

Vicat Softening Temperature

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286 °F

141 °C

ISO 306/B50

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331 °F

166 °C

ISO 306/A120

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Surface Resistivity

IEC 60093

> 1.0E+15 ohms

> 1.0E+15 ohms

Volume Resistivity

IEC 62631-3-1

> 1.0E+13 ohms·m

> 1.0E+13 ohms·m

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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Burning Rate

0.0787 In (2.00 Mm)

2.4 in/min

60 mm/min

ISO 3795

0.0787 In (2.00 Mm)

2.4 in/min

60 mm/min

FMVSS 302

Flammability Classification

0.06 In (1.5 Mm)

HB

HB

IEC 60695-11-10,
-20

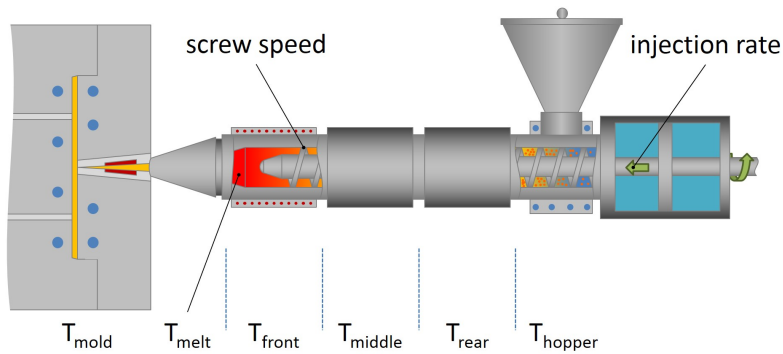
Additional Information

- 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 Rate	Moderate-Fast	Moderate-Fast

Injection Notes

Polypropylene is not hygroscopic and generally does not require drying. As a good practice and to avoid residual humidity from transport or storage conditions, we recommend drying the material.

Ensure good mold venting

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.

Notes

These are typical property values not to be construed as specification limits.