Technical Data Sheet

Polyfort FPP 1151E

Polypropylene
LyondellBasell Industries
Engineering Plastics

Product Description
Extrusion grade, 40% calcium carbonate filled, high molecular weight polypropylene.

General		
Material Status	• Commercial: Active	
Availability	• North America	
Filler / Reinforcement	• Calcium Carbonate, 40% Filler by Weight	
Processing Method	• Extrusion	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.26	1.26 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°c/2.16 Kg)	0.30 to 0.60 g/10 min	0.30 to 0.60 g/10 min	ASTM D1238 ISO 1133
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	0.30 to 0.60 cm³/10min	0.30 to 0.60 cm³/10min	ASTM D1238
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength			
Yield, 73°f (23°c) [1]	3480 psi	24.0 MPa	ASTM D638
Yield, 73°f (23°c)	3630 psi	25.0 MPa	ISO 527-2/50
Flexural Modulus - Tangent			
73°f (23°c) [2]	334000 psi	2300 MPa	ASTM D790
73°f (23°c) [3]	406000 psi	2800 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179
73°f (23°c), Injection Molded	4.8 ft·lb/in²	10 kJ/m²	
Notched Izod Impact			
73°f (23°c), Injection Molded	2.3 ft·lb/in	130 J/m	ASTM D256
73°f (23°c), Injection Molded	4.8 ft·lb/in²	10 kJ/m²	ISO 180
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Rockwell Hardness (R-scale)	88	88	ASTM D785
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	212 °F	100 °C	ASTM D648
264 Psi (1.8 Mpa), Unannealed	136 °F	58.0 °C	ASTM D648
264 Psi (1.8 Mpa), Unannealed	144 °F	62.0 °C	ISO 75-2/A

Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Filler Content	40 %	40 %	ASTM D5630

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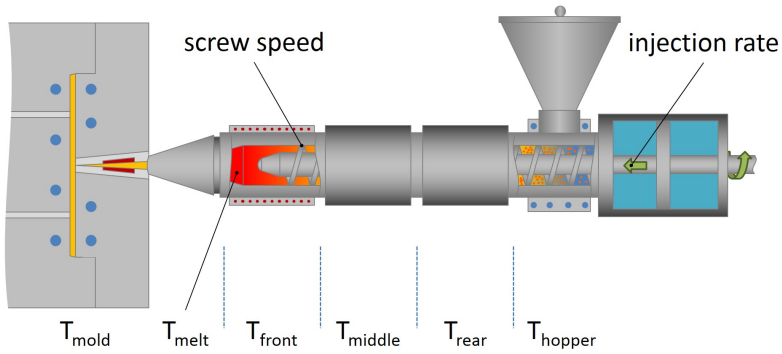

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Moderate-Fast	Moderate-Fast

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.