

Technical Data Sheet

Polyfort FPP 3790

Polypropylene
LyondellBasell Industries
Engineering Plastics

Product Description

PP compound with 40% talc filler. Long term heat stabilized.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • North America
Filler / Reinforcement	• Talc, 40% Filler by Weight
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.25 g/cm ³	1.25 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 Kg)	11 cm ³ /10min	11 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	653000 psi	4500 MPa	ISO 527-1
Tensile Stress (Break)	3630 psi	25.0 MPa	ISO 527-2
Tensile Strain (Break)	3.8 %	3.8 %	ISO 527-2
Flexural Modulus	725000 psi	5000 MPa	ISO 178
Flexural Stress (7.0% Strain)	2900 psi	20.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	0.81 ft·lb/in ²	1.7 kJ/m ²	
73°F (23°C)	1.1 ft·lb/in ²	2.3 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	4.8 ft·lb/in ²	10 kJ/m ²	
73°F (23°C)	7.1 ft·lb/in ²	15 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	266 °F	130 °C	ISO 75-2/B
264 Psi (1.8 Mpa), Unannealed	165 °F	74.0 °C	ISO 75-2/A

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 62631-3-2
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate (0.0787 In (2.00 Mm))	2.0 in/min	50 mm/min	ISO 3795
Flammability Classification			IEC 60695-11-10, -20
0.03 In (0.8 Mm)	HB	HB	
0.06 In (1.6 Mm)	HB	HB	

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.