

Technical Data Sheet

Polyfort FPP 20/10 TGF

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description

10% glass fibre and 10% talc filled PP homopolymer with high strength and low warpage.

General

Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight • Talc, 10% Filler by Weight
Features	• High Strength • Homopolymer • Low Warpage
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	7.0 cm ³ /10min	7.0 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	522000 psi	3600 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	6240 psi	43.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	6.0 %	6.0 %	ISO 527-2/1A/5
Flexural Modulus	580000 psi	4000 MPa	ISO 178
Flexural Stress	11600 psi	80.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	1.9 ft·lb/in ²	4.0 kJ/m ²	
73°f (23°c)	2.4 ft·lb/in ²	5.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	12 ft·lb/in ²	25 kJ/m ²	
73°f (23°c)	19 ft·lb/in ²	40 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	293 °F	145 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	239 °F	115 °C	ISO 75-2/ Af
Vicat Softening Temperature			
--	221 °F	105 °C	ISO 306/B50
--	320 °F	160 °C	ISO 306/A50

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·cm	> 1.0E+13 ohms·cm	IEC 60093

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	HB	

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.

Notes

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