

Technical Data Sheet

# Polyfort FPP 40 T LE K1858

Polypropylene Homopolymer  
LyondellBasell Industries  
Engineering Plastics

**Product Description**  
40% talc filled PP homopolymer, low emission

General	
Filler / Reinforcement	• Talc, 40% Filler by Weight
Features	• Homopolymer • Low Emissions
Automotive Specifications	• GM QK 003813 Color: Black
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.26 g/cm <sup>3</sup>	1.26 g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 Kg)	6.0 cm <sup>3</sup> /10min	6.0 cm <sup>3</sup> /10min	ISO 1133
Water Absorption			ISO 62
Equilibrium, 73°F (23°C), 50% Rh	0.20 %	0.20 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	522000 psi	3600 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	4350 psi	30.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	3.0 %	3.0 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.2 ft·lb/in <sup>2</sup>	2.5 kJ/m <sup>2</sup>	
73°F (23°C)	1.4 ft·lb/in <sup>2</sup>	3.0 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	6.7 ft·lb/in <sup>2</sup>	14 kJ/m <sup>2</sup>	
73°F (23°C)	10 ft·lb/in <sup>2</sup>	21 kJ/m <sup>2</sup>	
Notched Izod Impact (Area) (73°F (23°C))	1.90 ft·lb/in <sup>2</sup>	4.00 kJ/m <sup>2</sup>	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	10600 psi	73.0 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	271 °F	133 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	176 °F	80.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	207 °F	97.0 °C	ISO 306/B50
--	313 °F	156 °C	ISO 306/A120

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·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)	1.9 in/min	48 mm/min	ISO 3795
0.0787 In (2.00 Mm)	1.9 in/min	48 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	HB	
0.12 In (3.0 Mm)	HB	HB	
Glow Wire Flammability Index	1380 °F	750 °C	IEC 60695-2-12

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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.