Technical Data Sheet

Polyfort FPP 30 GFC K1079

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description
30 % glass fibre reinforced PP-Homopolymer, long term heat stabilized, low emission.

General			
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Chemically Coupled	• Heat Stabilized	• Homopolymer
Automotive Specifications	• FORD WSB-M4D732-A3 • FORD WSK-M4D732-A1 • FORD WSS-M4D854-B1	• GM GMW15702 -024161 PP-GF30 • GM GMW15702 -024162 PP-GF30 Color: Black LW • GM QK 003824 Color: Black	• IMDS ID 4862916 Color: Black
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.13 g/cm³	1.13 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	5.0 cm³/10min	5.0 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	943000 psi	6500 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	12300 psi	85.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2/1A/5
Flexural Modulus [1]	870000 psi	6000 MPa	ISO 178
Flexural Stress [1]			ISO 178
3.4% Strain	18600 psi	128 MPa	
3.6% Strain [2]	18300 psi	126 MPa	
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
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)	21 ft·lb/in²	45 kJ/m²	
73°f (23°c)	23 ft·lb/in²	48 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	18600 psi	128 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	318 °F	159 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	293 °F	145 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	266 °F	130 °C	ISO 306/B50
--	329 °F	165 °C	ISO 306/A50
Ball Pressure Test (293°f (145°c))	Pass	Pass	IEC 60695-10-2
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

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	2.3 in/min	58 mm/min	ISO 3795
0.0787 In (2.00 Mm)	2.3 in/min	58 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			IEC 60695-2-12
0.06 In (1.5 Mm)	1340 °F	725 °C	
0.12 In (3.0 Mm)	1380 °F	750 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 In (1.5 Mm), Passes	1380 °F	750 °C	
0.12 In (3.0 Mm), Passes	1430 °F	775 °C	

Additional Information

1.) Not for use in food contact applications
2.) Not for use in medical or pharmaceutical applications

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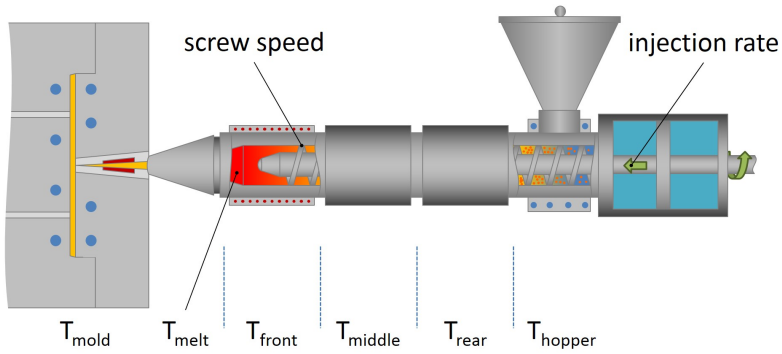

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Moderate-Fast	Moderate-Fast

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

[1] 0.079 in/min (2.0 mm/min)

[2] at Break

Notes

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