Technical Data Sheet

Polyfort PPH GF50 EP SF H3

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description
50% glass fibre reinforced PP homopolymer, long term heat stabilized, high flowability

General			
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Features	• Chemically Coupled • Heat Stabilized	• High Flow • Homopolymer	• Low Emissions
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PP-H 50 GF		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.33 g/cm³	1.33 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	15 cm³/10min	15 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	1.60E+6 psi	11000 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	18000 psi	124 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.4 %	2.4 %	ISO 527-2/1A/5
Flexural Modulus	1.77E+6 psi	12200 MPa	ISO 178
Flexural Stress [1] (73°f (23°c))	27700 psi	191 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	5.2 ft·lb/in²	11 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)	31 ft·lb/in²	66 kJ/m²	
73°f (23°c)	28 ft·lb/in²	58 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	22200 psi	153 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	322 °F	161 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	309 °F	154 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	293 °F	145 °C	ISO 306/B50
--	327 °F	164 °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·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)	2.4 in/min	60 mm/min	ISO 3795
0.0787 In (2.00 Mm)	2.4 in/min	60 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	

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Additional Information

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

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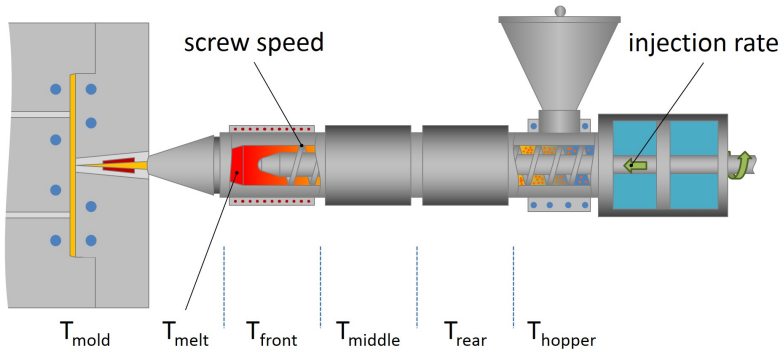

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Moderate-Fast	Moderate-Fast

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.