Technical Data Sheet

Polyfort PPH GBF 3020 RD H3

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description

Glass fibre reinforced PP-Homopolymer, chemically coupled with reduced Density and improved shrinkage. Long-term heat stabilized

General

Filler / Reinforcement	• Glass Fiber		
Features	• Chemically Coupled	• Heat Stabilized	• Homopolymer
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PP-GF		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.980 g/cm³	0.980 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	6.0 cm³/10min	6.0 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	769000 psi	5300 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	10200 psi	70.0 MPa	ISO 527-2
Tensile Strain (Break)	3.2 %	3.2 %	ISO 527-2
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	3.3 ft·lb/in²	7.0 kJ/m²	
73°f (23°c)	3.3 ft·lb/in²	7.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	14 ft·lb/in²	30 kJ/m²	
73°f (23°c)	21 ft·lb/in²	45 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	20300 psi	140 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	302 °F	150 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	284 °F	140 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	266 °F	130 °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·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)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 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	

Additional Information

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

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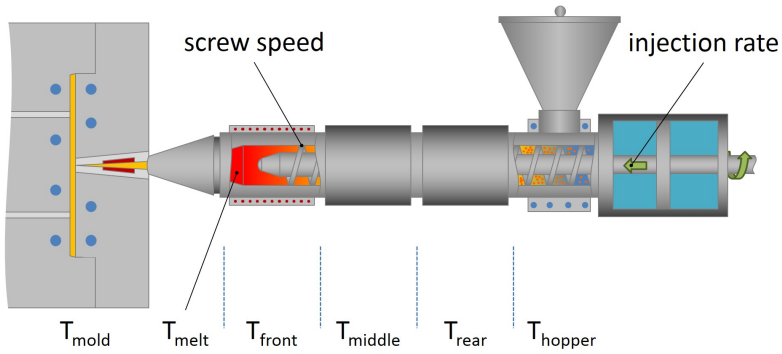

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Hopper Temperature	158 to 176 °F	70 to 80 °C
Rear Temperature	> 446 °F	> 230 °C
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Pressure	< 16000 psi	< 110 MPa
Injection Rate	Moderate	Moderate
Back Pressure	< 725 psi	< 5.00 MPa

Injection Notes

1) Drying normally not necessary.
2) Reduced Density (RD) grades are sensitive for shear-stress. Therefore moderate injection- (< 1100 bar) and dosing rates are recommended. In addition for plasticizing a back pressure less than 50 bar is recommended.

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.