Technical Data Sheet

Polyfort FPP 40 GFC SHI BLK

Polypropylene, Homopolymer

Product Description

40% glass fiber reinforced high impact PP-Homopolymer, chemically coupled

Regulatory Status

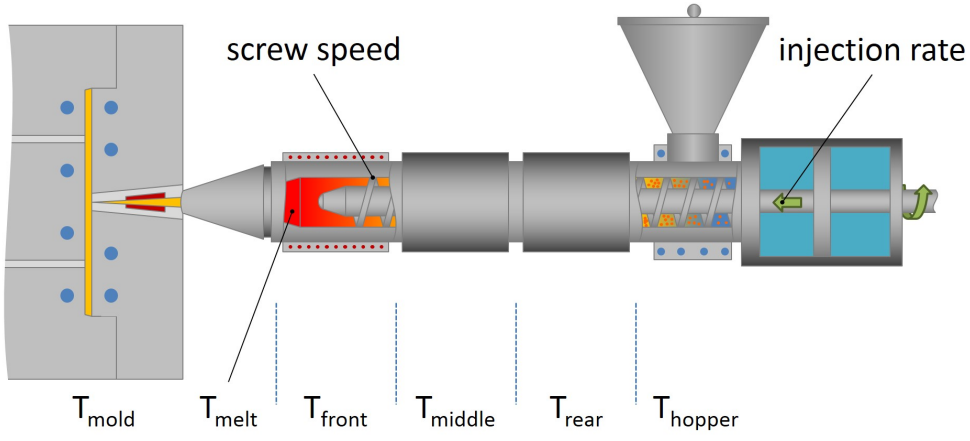
For regulatory compliance information, see *Polyfort* FPP 40 GFC SHI BLK Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 40%
Resin ID	PP-H 40GFC HI

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate			
(230 °C/2.16 kg)	2.0	cm³/10 min	ISO 1133
(230 °C/5.0 kg)	7.0	cm³/10 min	ISO 1133
Density, (Method A)	1.22	g/cm³	ISO 1183
Mechanical			
Tensile Modulus, (1 mm/min, Type 1A)	7700	MPa	ISO 527-1
Tensile Strain at Break, (Type 1A, 5 mm/min)	5.5	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	6600	MPa	ISO 178
Flexural Stress			
(2.0 mm/min, 3.5%)	120	MPa	ISO 178
(2.0 mm/min, 5.5%)	112	MPa	ISO 178
(2.0 mm/min, 4.5%)	120	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	80.0	MPa	ISO 527-2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	18	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	55	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	120	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(A (10N), 50 °C/h)	163	°C	ISO 306
(B (50N), 50 °C/h)	120	°C	ISO 306

Manufacturer website: https://www.lyondellbasell.com/en/

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	154	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	147	°C	ISO 75-2/A
Electrical			
Surface Resistivity	1E+15	ohm	IEC 60093
Volume Resistivity	10000000000000	ohm*m	IEC 62631-3-1
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795
UL Information			
Flammability Classification			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20



Injection Parameters	Nominal Value	Units
Drying Temperature	80	°C
Drying Time	2.0 to 3.0	hr
Processing (Melt) Temp	220 to 260	°C
Mold Temperature	30 to 60	°C
Injection Rate	Moderate-Fast	

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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