Technical Data Sheet

Polyfort FPP 40GFC SHI EU BLK

Polypropylene Compounds

Product Description

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

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 Strain at Break, (Type 1A, 5 mm/min)	5.5	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	6600	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	80.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	7700	MPa	ISO 527-1
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
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			
(B (50N), 50 °C/h)	120	°C	ISO 306
(A (10N), 50 °C/h)	163	°C	ISO 306

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			
Volume Resistivity	10000000000000	ohm*m	IEC 62631-3-1
Surface Resistivity	1E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
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 Time	2.0 to 3.0	hr
Drying Temperature	80	°C
Processing (Melt) Temp	220 to 260	°C
Injection Rate	Moderate-Fast	
Mold Temperature	30 to 60	°C