

Technical Data Sheet

Polyfort PPHGBF4030RD H3BLK70400



Polypropylene, Homopolymer

Product Description

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

Processing Method	Injection Molding
Attribute	Chemically Coupled; Heat Stabilized; Homopolymer
Filler/Reinforcement	Glass Bubble; Glass Fiber
Resin ID	PP-GF

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	10	cm ³ /10 min	ISO 1133
Density, (Method A)	1.00	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.0	%	ISO 527-2
Flexural Modulus	6100	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	90.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	6500	MPa	ISO 527-1
Flexural Stress	135	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	40	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	144	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	133	°C	ISO 306
(A (10N), 50 °C/h)	155	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	150	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	139	°C	ISO 75-2/A
Electrical			

Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Surface Resistivity	>1.0E+15	ohm	IEC 60093
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 Time		2.0 to 3.0	hr
Drying Temperature		80	°C
Processing (Melt) Temp		220 to 260	°C
Hopper Temperature		70 to 80	°C
Rear Temperature		>230	°C
Injection Rate		Moderate	
Back Pressure		<5.00	MPa
Mold Temperature		30 to 60	°C
Injection Pressure		<110	MPa