

Technical Data Sheet

Polyfort PPH GB10 RD NAT

Polypropylene, Homopolymer

Product Description

10% reinforced PP homopolymer with reduced density

Processing Method	Injection Molding
Attribute	Homopolymer; Low Density
Filler/Reinforcement	Glass Bubble, 10%
Resin ID	PP-H 10 GB

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	13	cm ³ /10 min	ISO 1133
Density, (Method A)	0.840	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	22.0	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	35	%	ISO 527-2
Flexural Modulus	1650	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	6.2	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	13.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1510	MPa	ISO 527-1
Flexural Stress, (Type 1A, 23 °C)	34.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	2.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	1.5	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	29	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	15	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	88.0	°C	ISO 306
(A (10N), 50 °C/h)	152	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	96.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	61.0	°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
Mold Temperature	30 to 60	°C