Technical Data Sheet

Polyfort RPP30EA18BK-MR GAPEX

Polypropylene, Homopolymer

Product Description
Primary use is for battery tray supports.

Processing Method	Injection Molding
Attribute	Chemically Coupled; Heat Stabilized
Forms	Pellets
Appearance	Black
Additive	Heat Stabilizer
Application	Support Trays
Filler/Reinforcement	Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(230 °C/2.16 kg)	4.0	g/10 min	ASTM D1238
(230 °C/2.16 kg)	3.8	g/10 min	ISO 1133
Density	1.14	g/cm³	ISO 1183
Density - Specific Gravity	1.13	g/cm³	ASTM D792
Mechanical			
Flexural Modulus	4750	MPa	ASTM D790
Tensile Elongation at Break	4	%	ASTM D638
Tensile Stress at Break	72.4	MPa	ISO 527-2
Impact			
Notched Izod Impact Strength			
(23 °C)	6.8	kJ/m²	ISO 180
(-40 °C)	4.8	kJ/m²	ISO 180
Gardner Impact	0.565	J	ASTM D3029
Unnotched Izod Impact, (23 °C)	530	J/m	ASTM D4812
Notched Izod Impact			
(23 °C)	65	J/m	ASTM D256
(-40 °C)	48	J/m	ASTM D256
Hardness			
Durometer Hardness, (Shore D)	95		ASTM D2240
Thermal			

Deflection Temperature Under Load Unannealed (0.45 MPa)	152	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	139	°C	ISO 75-2/A
Deflection Temperature Under Load Unannealed (264 psi)	149	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	163	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	71 to 82	°C
Nozzle Temperature	232 to 260	°C
Processing (Melt) Temp	221 to 238	°C
Front Temperature	232 to 260	°C
Middle Temperature	227 to 243	°C
Rear Temperature	221 to 238	°C
Injection Rate	Slow-Moderate	
Back Pressure	0.138 to 0.345	MPa
Mold Temperature	38 to 66	°C
Cushion	5.08 to 12.7	mm