

## Technical Data Sheet

### *Polyfort* RPP30EA18BK-BK GAPEXBLK



Polypropylene, Homopolymer

#### Product Description

Primary use is for battery tray supports.

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

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate			
(230 °C/2.16 kg)	3.8	g/10 min	ISO 1133
(230 °C/2.16 kg)	4.0	g/10 min	ASTM D1238
Density	1.14	g/cm <sup>3</sup>	ISO 1183
Density - Specific Gravity	1.13	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical</b>			
Flexural Modulus	4750	MPa	ASTM D790
Tensile Elongation at Break	4	%	ASTM D638
Tensile Stress at Break	72.4	MPa	ISO 527-2
<b>Impact</b>			
Notched Izod Impact Strength			
(23 °C)	6.8	kJ/m <sup>2</sup>	ISO 180
(-40 °C)	4.8	kJ/m <sup>2</sup>	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
<b>Hardness</b>			
Durometer Hardness, (Shore D)	95		ASTM D2240
<b>Thermal</b>			

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

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
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