Technical Data Sheet

Polyfort TPP20AC17BK-BKBLK

Polypropylene, Homopolymer

Product Description

Meets/Exceeds Ford Engineering Specification ESH-M4D293-B.Primary end use is for AC/heater ducts and similar components.

Processing Method	Injection Molding
Attribute	Heat Stabilized; Homopolymer
Forms	Pellets
Appearance	Black
Additive	Heat Stabilizer
Application	General Purpose
Filler/Reinforcement	Talc, 20%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	6.2	g/10 min	ASTM D1238
Density - Specific Gravity	1.06	g/cm³	ASTM D792
Mechanical			
Tensile Strength, (23 °C)	30.7	MPa	ASTM D638
Flexural Strength at Yield	51.7	MPa	ASTM D790
Flexural Modulus	2400	MPa	ASTM D790
Tensile Elongation at Break	20	%	ASTM D638
Impact			
Gardner Impact	0.678	J	ASTM D3029
Unnotched Izod Impact, (23 °C)	510	J/m	ASTM D4812
Notched Izod Impact, (23 °C)	32	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	100		ASTM D785
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)	69	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	120	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 3.0	hr
Drying Temperature	80	°C
Clamp Tonnage	2.8 to 4.1	kN/cm²
Nozzle Temperature	216 to 218	°C
Screw Speed	100 to 150	rpm
Processing (Melt) Temp	220 to 260	°C
Front Temperature	213 to 216	°C
Screw L/D Ratio	20.0-1.0	
Screw Compression Ratio	2.0-1.0	
Middle Temperature	210 to 213	°C
Rear Temperature	204 to 210	°C
Back Pressure	0.138 to 0.345	MPa
Mold Temperature	30 to 60	°C