

Technical Data Sheet

Polyfort TPP20AN53NA-NANAT



Polypropylene, Unspecified (PP, Unspecified)

Product Description

Polyfort TPP20AN53NA-NANAT is a Polypropylene, Unspecified Talc, 20% filled material and is typically used in Injection Molding applications. Features include: Good Dimensional Stability, and Good Impact Resistance.

Processing Method	Injection Molding
Attribute	Good Dimensional Stability; Good Impact Resistance
Forms	Pellets
Appearance	Natural Color
Application	Automotive Applications; General Purpose
Filler/Reinforcement	Talc, 20%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	7.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.06	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield	31	MPa	ASTM D638
Flexural Strength at Yield	44.8	MPa	ASTM D790
Flexural Modulus	2070	MPa	ASTM D790
Tensile Elongation at Break	25	%	ASTM D638
Impact			
Gardner Impact, (3.18 mm)	2.26	J	ASTM D3029
Unnotched Izod Impact, (23 °C)	750	J/m	ASTM D4812
Notched Izod Impact, (23 °C)	37	J/m	ASTM D256
Hardness			
Durometer Hardness, (Shore D)	71		ASTM D2240
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)	68.3	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	121	°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/cm ²
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