

## 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.

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

<b>Typical Properties</b>	<b>Nominal Value</b>	<b>Units</b>	<b>Test Method</b>
<b>Physical</b>			
Melt Flow Rate, (230 °C/2.16 kg)	7.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.06	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical</b>			
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
<b>Impact</b>			
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
<b>Hardness</b>			
Durometer Hardness, (Shore D)	71		ASTM D2240
<b>Thermal</b>			
Deflection Temperature Under Load Unannealed (264 psi)	68.3	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	121	°C	ASTM D648

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
Drying Time	2.0 to 3.0	hr
Drying Temperature	80	°C
Clamp Tonnage	2.8 to 4.1	kN/cm <sup>2</sup>
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