

Technical Data Sheet



# POLYFORT® MPP40FA05NA

Polypropylene  
Engineering Plastics

General	
Material Status	• Commercial: Active
Availability	• Latin America • North America
Filler / Reinforcement	• Mica, 40% Filler by Weight
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.26	1.26 g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow	8.0E-3 in/in	0.80 %	ASTM D955

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	4500 psi	31.0 MPa	ASTM D638
Tensile Elongation (Break)	8.0 %	8.0 %	ASTM D638
Flexural Modulus	450000 psi	3100 MPa	ASTM D790
Flexural Strength (Yield)	7400 psi	51.0 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	0.40 ft·lb/in	21 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	3.5 ft·lb/in	190 J/m	ASTM D256
Gardner Impact	4.00 in·lb	0.452 J	ASTM D3029

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	78	78	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	270 °F	132 °C	
264 psi (1.8 MPa), Unannealed	185 °F	85.0 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 °F	93 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Rear Temperature	400 to 415 °F	204 to 213 °C
Middle Temperature	410 to 420 °F	210 to 216 °C
Front Temperature	420 to 425 °F	216 to 218 °C
Nozzle Temperature	425 to 440 °F	218 to 227 °C
Mold Temperature	110 to 135 °F	43 to 57 °C
Back Pressure	50.0 to 100 psi	0.345 to 0.689 MPa

**Notes**

These are typical property values not to be construed as specification limits.