

Technical Data Sheet
Matrixx TPP1B40

Polypropylene
 Engineering Plastics



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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.25	1.25 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10 g/10 min	10 g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in (3.18 mm))	5.0E-3 to 9.0E-3 in/in	0.50 to 0.90 %	Internal Method

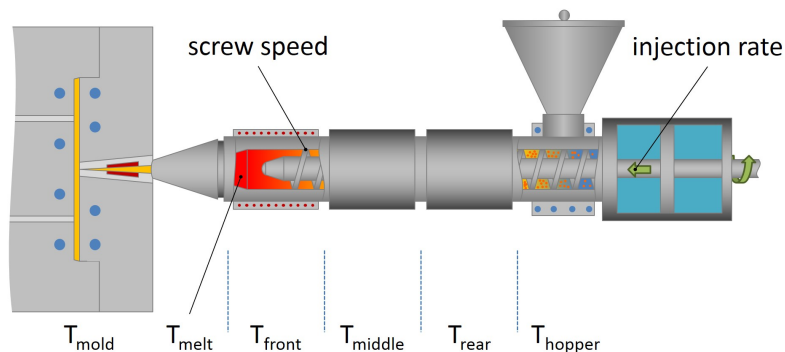
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	4500 psi	31.0 MPa	ASTM D638
Flexural Modulus - Tangent	540000 psi	3720 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	0.50 ft·lb/in	27 J/m	ASTM D256
Gardner Impact	< 10.0 in·lb	< 1.13 J	ASTM D5420

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	180 °F	82.2 °C	
RTI Str	65.0 °F	18.3 °C	UL 746

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm))	HB	HB	UL 94

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 to 220 °F	82 to 104 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	350 to 430 °F	177 to 221 °C
Middle Temperature	350 to 430 °F	177 to 221 °C
Front Temperature	350 to 430 °F	177 to 221 °C
Processing (Melt) Temp	390 to 440 °F	199 to 227 °C
Mold Temperature	70 to 120 °F	21 to 49 °C
Injection Rate	Moderate	Moderate
Back Pressure	20.0 to 300 psi	0.138 to 2.07 MPa
Cushion	0.250 to 0.500 in	6.35 to 12.7 mm

Injection Notes

- Drying not normally required
- Injection Booster Pressure: Maximum without flash, 60% of machine maximum, target
- Screw Speed: Slow to Medium

Notes

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