Technical Data Sheet

FERREX® GPP40CC

Polypropylene
Engineering Plastics

General	
Filler / Reinforcement	• Calcium Carbonate, 40% Filler by Weight
Features	• High Gloss
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.24	1.24 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	9.0E-3 in/in	0.90 %	ASTM D955
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength (Yield)	3400 psi	23.4 MPa	ASTM D638
Tensile Elongation (Break)	40 %	40 %	ASTM D638
Flexural Modulus	340000 psi	2340 MPa	ASTM D790
Flexural Strength (Yield)	5700 psi	39.3 MPa	ASTM D790
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	0.75 ft·lb/in	40 J/m	
Unnotched Izod Impact			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	9.5 ft·lb/in	510 J/m	
Gardner Impact	15.0 in·lb	1.69 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	235 °F	113 °C	
264 psi (1.8 MPa), Unannealed	160 °F	71.1 °C	

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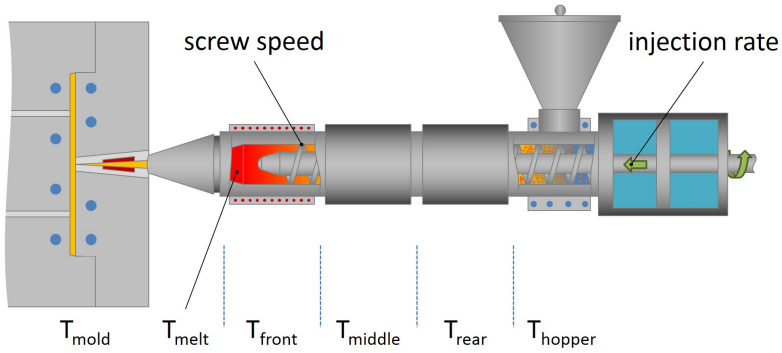

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 °F	93 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Rear Temperature	390 to 400 °F	199 to 204 °C
Middle Temperature	400 to 410 °F	204 to 210 °C
Front Temperature	410 to 420 °F	210 to 216 °C
Nozzle Temperature	420 to 430 °F	216 to 221 °C
Mold Temperature	115 to 140 °F	46 to 60 °C
Back Pressure	20.0 to 50.0 psi	0.138 to 0.345 MPa
Screw Speed	100 to 150 rpm	100 to 150 rpm
Clamp Tonnage	2.0 to 3.0 tons/in²	2.8 to 4.1 kN/cm²
Screw L/D Ratio	20.0:1.0	20.0:1.0
Screw Compression Ratio	2.0:1.0	2.0:1.0

Notes

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