

Technical Data Sheet

# Ferrex GPP40CC

Polypropylene  
LyondellBasell Industries  
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/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR)	8.0 g/10 min	8.0 g/10 min	ASTM D1238

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 D4812
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/in <sup>2</sup>	2.8 to 4.1 kN/cm <sup>2</sup>
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.