

Technical Data Sheet

Ferrex GPP20CS07NA

Polypropylene
LyondellBasell Industries
Engineering Plastics

General			
Filler / Reinforcement	• Calcium Carbonate, 21% Filler by Weight		
Additive	• Impact Modifier		
Features	• Good Impact Resistance	• High Gloss	• Impact Modified
Uses	• Housings	• Lawn and Garden Equipment	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg)	12 g/10 min	12 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	3400 psi	23.4 MPa	ASTM D638
Tensile Elongation (Break, 73°F (23°C))	200 %	200 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°F (23°C)	219000 psi	1510 MPa	
Tangent : 73°F (23°C)	243000 psi	1670 MPa	
Flexural Strength (73°F (23°C))	5500 psi	37.9 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.9 ft·lb/in	100 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	23 ft·lb/in	1200 J/m	ASTM D4812
Gardner Impact			ASTM D5420
73°F (23°C), 0.125 In (3.18 Mm)	240 in·lb	27.1 J	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	175 °F	79.4 °C	
264 Psi (1.8 Mpa), Unannealed	120 °F	48.9 °C	

Additional Information
 The value listed as Unnotched Izod Impact, ASTM D256, was tested in accordance with ASTM D4812.
 Elongation @ break, 73°F, ASTM D638: >200%

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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 ²	2.8 to 4.1 kN/cm ²
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.