Technical Data Sheet

Ferrex GPP20CS42BK

Polypropylene
LyondellBasell Industries
Engineering Plastics

General			
Filler / Reinforcement	• Calcium Carbonate, 20% Filler by Weight		
Additive	• Impact Modifier		
Features	• Good Impact Resistance	• High Gloss	• Impact Modified
Uses	• Housings	• Lawn and Garden Equipment	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°c/2.16 Kg)	10 g/10 min	10 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))	150 %	150 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°f (23°c)	194000 psi	1340 MPa	
Tangent : 73°f (23°c)	220000 psi	1520 MPa	
Flexural Strength (73°f (23°c))	5100 psi	35.2 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
Gardner Impact (73°f (23°c))	270 in·lb	30.5 J	ASTM D5420
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Durometer Hardness (Shore D)	68	68	ASTM D2240
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	202 °F	94.4 °C	
264 Psi (1.8 Mpa), Unannealed	• 125 °F • 124	• 51.7 °C • 51.1	

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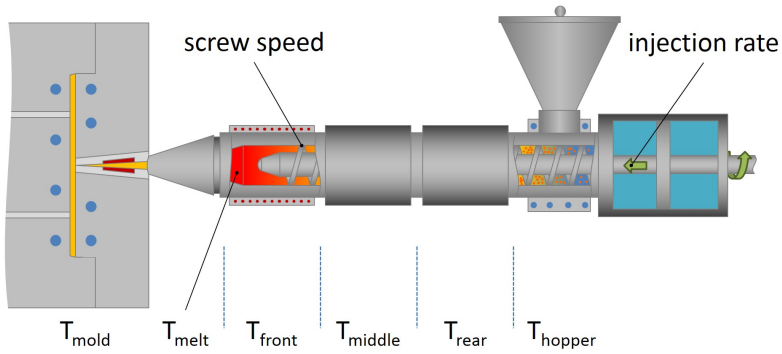

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 °F	93 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Rear Temperature	390 to 400 °F	199 to 204 °C
Middle Temperature	400 to 410 °F	204 to 210 °C
Front Temperature	410 to 420 °F	210 to 216 °C
Nozzle Temperature	420 to 430 °F	216 to 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.