

Technical Data Sheet

**Ferrex GPP20CK HB-BK**

Polypropylene
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active		
Availability	• Latin America	• North America	
Filler / Reinforcement	• Calcium Carbonate, 20% Filler by Weight		
Features	• Good Impact Resistance	• High Gloss	
Uses	• Handles	• Lawn and Garden Equipment	• Protective Coverings
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.06	1.06 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	3000 psi	20.7 MPa	ASTM D638
Tensile Elongation (Break)	36 %	36 %	ASTM D638
Flexural Modulus	180000 psi	1240 MPa	ASTM D790
Flexural Strength (Yield)	4400 psi	30.3 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.6 ft·lb/in	85 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	No Break	No Break	ASTM D4812
Gardner Impact (0.125 in (3.18 mm))	200 in·lb	22.6 J	ASTM D3029
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	66	66	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	190 °F	87.8 °C	
264 psi (1.8 MPa), Unannealed	130 °F	54.4 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating	HB	HB	UL 94

Technical Data Sheet



Ferrex GPP20CK HB-BK

Polypropylene
LyondellBasell Industries
Engineering Plastics



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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2024

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.