Technical Data Sheet

LyondellBasell

Ferro Pp TPP20AF39BK

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description			
Meets/Exceeds Ford Engineering Specification WSS-M4D729-A4. Primary end use is for head lamp housings.			
General			
Material Status	• Commercial: Active		
Availability	• Latin America	• North America	
Filler / Reinforcement	• Talc, 20% Filler by Weight		
Additive	• Heat Stabilizer	• UV Stabilizer	
Features	• Heat Stabilized	• Homopolymer	• UV Resistant
Automotive Specifications	• FORD WSS-M4D729-A4 Color: Black		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

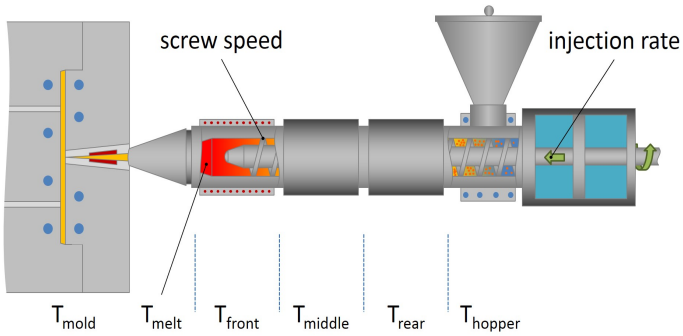
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm³	1.05 g/cm³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.5 g/10 min	5.5 g/10 min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Stress (Yield, 73°F (23°C))	4470 psi	30.8 MPa	ISO 527-2
Flexural Modulus	392000 psi	2700 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact Strength			ISO 180
-40°F (-40°C)	1.1 ft·lb/in²	2.4 kJ/m²	
73°F (23°C)	1.7 ft·lb/in²	3.5 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	252 °F	122 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	162 °F	72.0 °C	ISO 75-2/A

Additional Information
Tensile/Izod Change, ISO 188, 1000 hours, 140°C: +15%/+5%

Technical Data Sheet

Ferro Pp TPP20AF39BK

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C

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/.

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.