

Technical Data Sheet

**Polyfort TPP3C20HSBK21**

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Talc, 20% Filler by Weight
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Density / Specific Gravity	1.04	1.04 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	8.1 g/10 min	8.1 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Strength (Yield, 73°F (23°C))	4170 psi	28.8 MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	12 %	12 %	
Break	51 %	51 %	
Flexural Modulus (73°F (23°C))	329000 psi	2270 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	1.2 ft·lb/in	64 J/m	

Additional Information

1F937A/PR2970
Revision: 5/2/2020

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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
Rear Temperature	350 to 430 °F	177 to 221 °C
Middle Temperature	350 to 430 °F	177 to 221 °C
Front Temperature	350 to 430 °F	177 to 221 °C
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Moderate-Fast	Moderate-Fast
Back Pressure	20.0 to 300 psi	0.138 to 2.07 MPa
Cushion	0.250 to 0.500 in	6.35 to 12.7 mm

Injection Notes

Polypropylene is not hygroscopic and generally does not require drying. As a good practice and to avoid residual humidity from transport or storage conditions, we recommend drying the material.

Ensure good mold venting

Injection molding parameters also influence emission properties, which are often required for automotive interior applications. Generally speaking, the emission, odor and fogging behavior of finished parts is improved by lowering the melt temperature, reducing residence time and avoiding high shear stress.

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/>.

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