

Technical Data Sheet

**Polyfort PP 2173**

Polypropylene
LyondellBasell Industries
Engineering Plastics

Product Description

PP High Impact Unfilled

General

Material Status	• Commercial: Active
Availability	• North America
Features	• High Impact Resistance
Automotive Specifications	• NISSAN NES M8021 PP-IC3-32 • TOYOTA TSM 5514G-5
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.912	0.910 g/cm ³	ASTM D792
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	2900 psi	20.0 MPa	ASTM D638
Tensile Elongation ¹ (Break)	650 %	650 %	ASTM D638
Flexural Modulus ²	116000 psi	800 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	9.4 ft·lb/in	500 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	185 °F	85.0 °C	ASTM D648

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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
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

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.

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Notes

¹ 0.39 in/min (10 mm/min)

² 0.079 in/min (2.0 mm/min)

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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