

Technical Data Sheet

**Matrixx PP5A0**

Polypropylene Impact Copolymer
LyondellBasell Industries
Engineering Plastics

Product Description

PP5A0 is an Unfilled, High Impact Polypropylene Copolymer

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Copolymer
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.910	0.908 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, 73°F (23°C))	3030 psi	20.9 MPa	ASTM D638
Tensile Elongation (Yield)	12 %	12 %	ASTM D638
Flexural Modulus - Tangent	142000 psi	979 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	12 ft·lb/in	640 J/m	
Gardner Impact	224 in·lb	25.3 J	ASTM D3029

Additional Information

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 to 220 °F	82 to 104 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	350 to 450 °F	177 to 232 °C
Middle Temperature	350 to 450 °F	177 to 232 °C
Front Temperature	350 to 450 °F	177 to 232 °C
Processing (Melt) Temp	380 to 450 °F	193 to 232 °C
Mold Temperature	70 to 120 °F	21 to 49 °C
Injection Rate	Moderate	Moderate
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

- Drying not normally required
- Screw Speed: Slow to Medium
- Injection Booster Pressure: Maximum without flash, 60% of machine maximum, target

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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