

Technical Data Sheet

**Matrixx PP5A0BK21**

Polypropylene Copolymer
LyondellBasell Industries
Engineering Plastics

Product Description

PP5A0BK21 is a High-Impact Polypropylene

General

Material Status	• Commercial: Active
Availability	• North America
Features	• High Impact Resistance
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))	3020 psi	20.8 MPa	ASTM D638
Tensile Elongation (Yield)	12 %	12 %	ASTM D638
Flexural Modulus	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 D5420

Additional Information

1F869A/PR1127
Revision: 10/15/2020

Technical Data Sheet



Matrixx PP5A0BK21

Polypropylene Copolymer
LyondellBasell Industries
Engineering Plastics



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/>.

© 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

Page: 2 of 3
LyondellBasell

www.lyondellbasell.com
Publish Date: 2024-03-14

Technical Data Sheet

**Matrixx PP5A0BK21**

Polypropylene Copolymer
LyondellBasell Industries
Engineering Plastics

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