

Technical Data Sheet



Schularene N3103

Poly(lactic Acid)
LyondellBasell Industries
Custom Powders

Product Description

Schularene™ N3103 is a high heat PLA.
This material achieves a higher heat deflection temperature as standard PLA.
The heat performance is similar to PS, PP and ABS.
As powder it's used for laminating adhesive in textile or automotive applications.
We recommend for most applications pre-drying before processing.

General

Material Status	• Commercial: Active		
Availability	• Europe		
Features	• Good Adhesion	• High Heat Resistance	• Renewable Resource Content
Uses	• Automotive Applications	• Textile Applications	
Appearance	• Natural Color		
Forms	• Powder		
Processing Method	• Coating	• Laminating	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.24 g/cm ³	1.24 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (210°C/2.16 kg)	30 g/10 min	30 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	435000 psi	3000 MPa	ASTM D638
Tensile Strength	6530 psi	45.0 MPa	ASTM D638
Tensile Strain (Break)	5.0 %	5.0 %	ISO 527-2
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.4 ft·lb/in ²	5.0 kJ/m ²	ISO 179
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	221 °F	105 °C	ISO 75-2/B
Peak Melting Temperature	374 to 428 °F	190 to 220 °C	DSC

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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