

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			
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 <sup>3</sup>	1.24 g/cm <sup>3</sup>	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 <sup>2</sup>	5.0 kJ/m <sup>2</sup>	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.