

PA 11 ESD

TDS for Lisa X

Material's Technical Data Sheet

Bio-sourced nylon material with heat resistance and ESD functionality. Dedicated for electrostatic safe parts for electronic and automotive industries.

Compatible with:



FEATURES

- antistatic properties
- better thermal properties
- dimension stability

APPLICATIONS

- tools and testers in electronics production
- electronic casing
- automotive parts
- high-accuracy parts



General properties

Test method

Software	Sinterit Studio Advanced	-	
Nitrogen needed	yes	-	
Colour	grey	-	internal
Refresh ratio ¹	60	%	internal
Printout density	1.03	g/cm ³	PN-EN ISO 845:2010
Printout water absorption	0.16	%	PN-EN ISO 62:2008
Particle size	20-80	µm	ISO 13320
Mean particle size	45	µm	ISO 13320

Mechanical properties

			Test method
Tensile Strength (X direction)	50	MPa	PN-EN ISO 527-1:2012
Tensile Modulus (X direction)	2080	MPa	PN-EN ISO 527-1:2012
Elongation at Break (X direction)	28	%	PN-EN ISO 527-1:2012
Flexural Strength (X direction)	56	MPa	PN-EN ISO 178:2019
Flexural Modulus (X direction)	1240	MPa	PN-EN ISO 178:2019
Impact strength X (Charpy - unnotched)	59	kJ/m ²	PN-EN ISO 179-1:2010
Shore Hardness in D scale	76		PN-EN ISO 868:2005

Thermal properties

			Test method
Melting temperature	204	°C	PN-EN ISO 11357:2018
HDT A	103	°C	PN-EN ISO 179-1:2010
HDT B	172	°C	PN-EN ISO 306:2014-02

ESD Properties²

			Test method
Specific volume resistance	10x10 ⁵	Ωcm	IEC 62631-3-1
Specific surface resistance	5.3x10 ⁴	Ω	IEC 62631-3-2

1. Refresh ratio is the amount of refreshing powder that is required to be mixed after the printing with unsintered material.
2. Depend on print geometry.

Information provided within this document are average values for reference and comparison only. All tests were performed with print samples from Lisa PRO printed from the fresh powder. Parameters presented in this specification are subject to change without notice. Final part properties may vary based on printed part design, print orientation, and material handling. All mechanical tests were carried out on samples conditioned to ISO standards at (23 ± 2)°C and (50 ± 5)% r. h.