PA12 Smooth

TDS for Lisa X

Material's Technical Data Sheet

A cost effective nylon 12 powder with excellent surface resolution. Perfect for detailed objects and general prototypes.

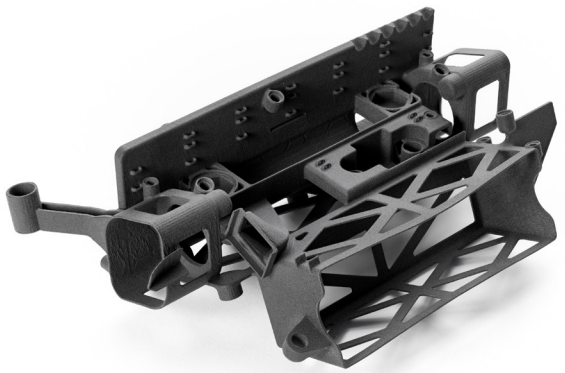
Compatible with: LISA PRO, LISA X

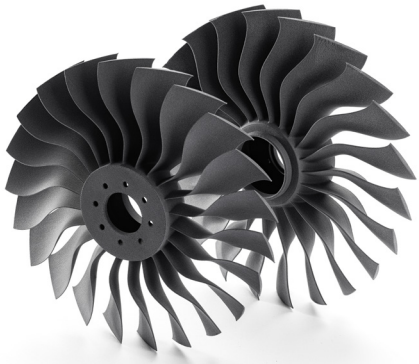
FEATURES

- good quality-to-price ratio
- excellent quality print surface and details
- high chemical resistance

APPLICATIONS

- detailed printouts
- complex spatial shapes
- structural or mechanical elements
- functional prototypes or final parts
- chemically resistant objects





General information			Test method
Nitrogen needed	No	-	-
Colour	navy grey	-	internal
Refresh ratio[1]	22	%	internal
Particle size	0.95-0.97	µm	PN-EN ISO 13320
Mean particle size	0.36-0.37	µm	PN-EN ISO 13320
Printout density	19-90	g/cm^3	PN-EN ISO 845:2010
Printout water absorption	38	%	PN-EN ISO 62:2008

SINTERIT
www.sinterit.com

Mechanical properties			Test method
Tensile Strength (X direction)	38.44	MPa	PN-EN ISO 527-1:2012
Tensile Strength (Y direction)	42.30	MPa	PN-EN ISO 527-1:2012
Tensile Modulus (X direction)	1572	MPa	PN-EN ISO 527-1:2012
Tensile Modulus (Y direction)	1662	MPa	PN-EN ISO 527-1:2012
Elongation at Break (X direction)	4.55	%	PN-EN ISO 527-1:2012
Elongation at Break (Y direction)	4.91	%	PN-EN ISO 527-1:2012
Flexural Strength (X direction)	49.18	MPa	PN-EN ISO 178:2019
Flexural Strength (Y direction)	50.28	MPa	PN-EN ISO 178:2019
Flexural Modulus (X direction)	1375	MPa	PN-EN ISO 178:2019
Flexural Modulus (Y direction)	1506	MPa	PN-EN ISO 178:2019
Impact strength X (Charpy - unnotched)	11.91	kJ/m^2	PN-EN ISO 179-1:2010
Impact strength Y (Charpy - unnotched)	20.24	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	185	°C	PN-EN ISO 11357:2018
HDT A (X direction)	50	°C	PN-EN ISO 75-2:2013-06
HDT A (Y direction)	59	°C	PN-EN ISO 75-2:2013-06
HDT B (X direction)	154	°C	PN-EN ISO 75-2:2013-06
HDT B (Y direction)	152	°C	PN-EN ISO 75-2:2013-06
Softening point (Vicat A50)	157	°C	PN-EN ISO 306:2014-02

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

Information provided within this document are average values for reference and comparison only. All tests were performed with print samples from Lisa X 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.

Rev. 26-06-2025