

# Flexa Performance

Material's Technical Data Sheet

TPU with high strength and flexibility, ideal for use in gaskets, flexible joint covers, vibration dampers and others where the strength of the flexible material is significant.



Compatible with



Features:

- Very good tear resistance.
- Excellent mechanical properties
- Resistant to repeated bending
- Chemical resistance

Applications:

- Shoe soles and insoles
- Elements of flexible covers in vehicles
- Seals
- Production tools



General information			Test method
Material type	TPU		
Software	All		
Nitrogen needed	no		
Refresh ratio(^1)	20 (^2)	%	
Colour	Light grey		
Particle size	70-90	µm	ISO 13320
Printout density	n/a	g/cm <sup>3</sup>	PN- EN ISO 845:2010
Printout water absorption	n/a	%	PN-EN ISO 62:2008
Mechanical properties			Test method
Tensile Strength	5.0 (^3)	MPa	PN-EN ISO 37:2007
Elongation at Break	100	%	PN-EN ISO 37:2007
Shore hardness in type A scale	86/88 (^4)		PN- EN ISO 868:2005
Thermal properties			Test method
Melting point	n/a	°C	internal procedure
Softening point (Vicat, A50)	n/a	°C	PN-EN ISO 3006:2014-02

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

2 Fexa materials have a 20 [%] refresh ratio.

3 It might need additional refresh with 50% in case of a drop of surface quality (every few to over a dozen printouts).

4 Depending on printing settings and the design

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



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