



# Flexa Black

Flexible and detailed

Excellent surface finish and feature details | Adjustable hardness | 100% reusable



## General information

General information		Method
Material type	TPU	
Granulation	20-105 [ $\mu\text{m}$ ]	
Color	Black	
Material refreshing ratio <sup>1</sup>	0 [%]	
Compatible with <sup>2</sup>	Lisa & Lisa Pro	

## Parameters

Tensile Strength	5.0 [MPa]	PN-EN ISO 37:2007
Elongation at Break	155 [%]	PN-EN ISO 37:2007
Shore hardness in type A scale	80 / 90 <sup>3</sup>	PN-EN ISO 868:2005

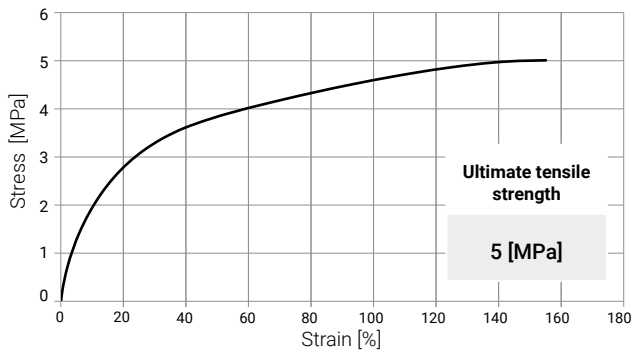
## Thermal properties

Softening point (Vicat method type A50)	82.3 [ $^{\circ}\text{C}$ ]	PN-EN ISO 306:2014-02
Melting point	160 [ $^{\circ}\text{C}$ ]	Internal procedure
Printout density	0.85 [ $\text{g}/\text{cm}^3$ ]	PN-EN ISO 845:2010

## Applications

Flexible parts or objects, medical devices, fantoms, cable jacketing.

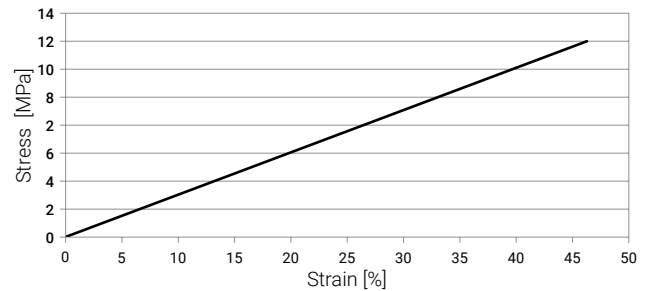
### Tensile testing



While the tensile stress does not exceed 2.3 [MPa], after load release, the test specimens retain their shape, with no external damage observed (e.g. fractures). The test specimens fracture when a max tensile stress of 5 [MPa] is applied.



### Compression testing



While the compressive stress does not exceed 12 [MPa], after load release, the test specimens retain their shape, with no external damage observed (e.g. fractures).



<sup>1</sup> Material refreshing ratio - percent of Fresh powder which has to be mixed with Used (unsintered) powder - to be reused during next print.

FLEXA has 100 [%] of usability.

<sup>2</sup> Available as part of the appropriate profile purchased.

<sup>3</sup> Depending on printing settings.