



# Flexa Grey

Functional flexibility

Flexible prints with increased extensibility | Adjustable hardness | 100% reusable



## General information

General information		Method
Material type	TPU	
Granulation	20 - 105 [µm]	
Color	Grey	
Material refreshing ratio <sup>1</sup>	0 [%]	
Compatible with <sup>2</sup>	Lisa & Lisa Pro	

## Parameters

Tensile Strength	3.7 [MPa]	PN-EN ISO 37:2007
Elongation at Break	136 [%]	PN-EN ISO 37:2007
Shore hardness in type A scale	70 / 90 <sup>3</sup>	PN-EN ISO 868:2005

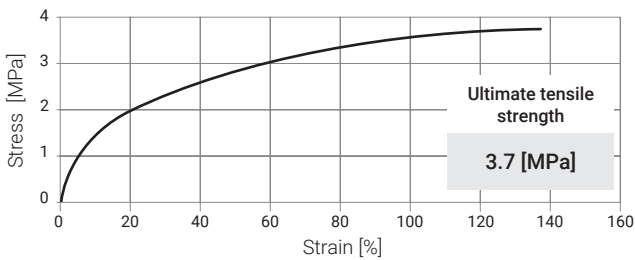
## Thermal properties

Softening point (Vicat method type A50)	67.6 [°C]	PN-EN ISO 306:2014-02
Melting point	160 [°C]	Internal procedure
Printout density	0.74 [g/cm <sup>3</sup> ]	PN-EN ISO 845:2010
Printout water absorption	9.1 [%]	PN-EN ISO 62:2008

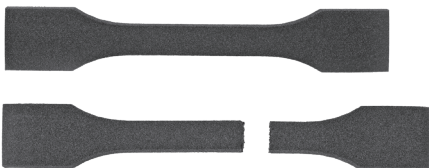
## Applications

Standard rubber items, prototypes and design, shock and vibration absorbers, protectors.

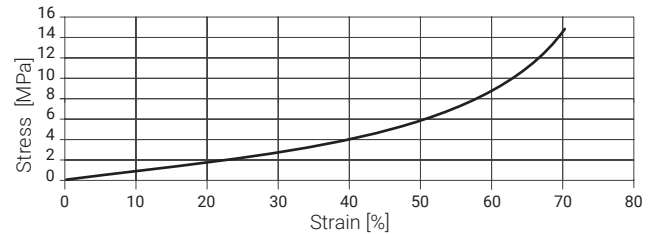
### Tensile testing



While the tensile stress does not exceed 1.8 [MPa], after load release, the test specimens retain their shape, with no external damage observed (e.g. fractures). The test specimens fracture when max tensile stress of 3.7 [MPa] is applied.



### Compression testing



While the compressive stress does not exceed 3.5 [MPa], after load release, the test specimens retain their shape, with no external damage observed (e.g. fractures).

After applying max compressive stress of 14.65 [MPa] and releasing the compressive load, the test specimens irreversibly change their volume from: 14.50 [mm] x 14.50 [mm] x 15.30 [mm] to: 14.85 [mm] x 14.85 [mm] x 14.85 [mm].



<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. Although to keep the parameters of printouts as high as it is possible, we recommend adding 10% of fresh powder each time.

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

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