



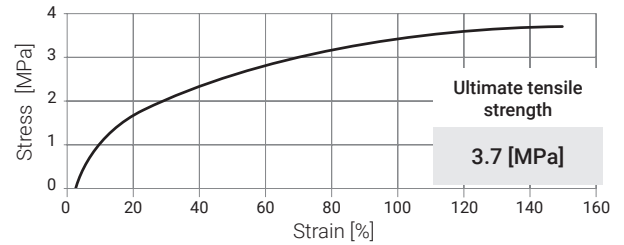
Flexa Grey

Functional flexibility

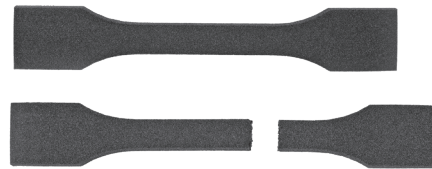
Flexible prints with increased extensibility | Adjustable hardness | 100% reusable



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.



General information

Method

| | |
|----------------------------------------|-----------------|
| Material type | TPU |
| Granulation | 20 - 105 [µm] |
| Color | Grey |
| Material refreshing ratio ¹ | 0 [%] |
| Compatible with ² | 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 ³ | 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/cm³] | PN-EN ISO 845:2010 |
| Printout water absorption | 9.1 [%] | PN-EN ISO 62:2008 |

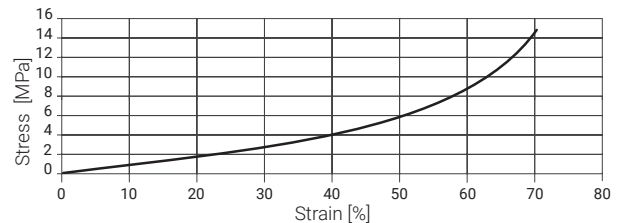
Applications

Easy elastic parts, vibration dampers, general prototyping of elastic parts.

Functions

Easy to process rubber, adjustable hardness (set up in Sinterit Studio).

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].



¹ 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.

² Available as part of the appropriate profile purchased.

³ Depending on printing settings.