

EASYPRINT™

FLEX TPU

Why should I use EasyPRINT™ FLEX TPU?

- Shore hardness of 95 A, very easy to print.
- Perfect spooling, no more tangled filament
- Easy to print with wide temperature span of 180° – 230° C
- Perfect roundness
- Perfect diameter tolerance within +/-0.05mm
- Smart length indicator on spool
- UV resistant



* Please see our website for latest options and colors available.



EasyPrint™ FLEX TPU

EasyPrint FLEX TPU is our latest flex material with focus on durability, flexibility and ease of use. It is a TPU (**T**hermoplastic **P**olyurethane) and is one of the most common used polymers for flexible materials. TPU has many great benefits as it has minimal warping, low shrinkage, is very durable and resistant to most chemicals and oils.



PRIMA™
-CREATOR-

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EasyPrint FLEX TPU has a shore value of 95 A which you can compare to the rubber heel of a shoe or a shopping cartwheel. Thanks to the relative high shore hardness it's also very easy to use with most printers. Even with printers that doesn't have a direct drive, like Ultimaker or BCN3D Sigma for instance.

The **"semi flex" formula** in our material is wonderful. You can control the print with infill. For instance, if you use less infill you will get a flexible, almost collapsible structure, that you can squeeze together but it will always return to its previous shape. If you use more infill you will get a print that is more like hard rubber (think care tire).

This, of course, opens for a very wide range of applications such as handles for bikes, shock absorbers, rubber seals, and insoles for shoes. Our TPU boasts with a massive 400% elongation at break.

Due to the very low shrinkage EasyPrint FLEX TPU is very easy to use in all FDM/FFF printers. The chances of warping are very small with EasyPrint FLEX and it works well without a heated build plate, but for larger prints and the absolute best results we recommend a heated build plate.

A temperature setting of 40-60°C, and a coat of PrimaFIX will make for a very good adhesion.

Please keep in mind that TPU is hydroscopic, meaning that it will absorb water if not stored correctly in a bag with silica gel bags or similar. If this should happen, you can always dry it in your oven for about 1 hour in 70° C and the TPU will be as good as new.

Flex materials is best printed in slow speeds around 15-30mm/s.

Tips for good results:

- Print in low speeds, 15-30mm/s
- Use heated bed if you have one
- Keep the filament dry at all times

Dimensions

Size:	Ø tolerance
1,75 mm	±0,05 mm
2,85 mm	±0,10 mm

Physical properties

Description:	Test method	Value
Density	ISO1183	1,21 g/cc
UV Resistant		

Mechanical properties

Description:	Test method	Value
Shore Hardness	ISO 868	95 A
Tensile strenght @ Yield	ISO 527-2	55 MPa
Elongation @ Break	ISO 527-2	400%
Abrasive Resistance	DIN 53516	30 mg/1000 cycles

Reseller: