



FLEX 45

FLEX 45 is a very flexible rubber replacing filament for 3D printing. The combination of flexibility, mechanical strength, durability and good resistance to chemicals and extreme temperatures makes it a unique filament. This BIO performance Thermoplastic Co-Polyester has a high carbon content of renewable materials resulting in less environmental impact. Finally FLEX 45 exhibits excellent UV resistance.

Material features:

- Very flexible
- Strong
- Long term heat resistant
- Good chemical resistance
- UV resistant



Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,14 g/cc
MFR 260°C/ 5 kg	ISO 1133	52 g/ 10 min
Tensile strength at break	ISO 527	24 Mpa
strain at break	ISO 527	530%
Tensile modulus	ISO 527	95 Mpa
Impact strength - Charpy notched 23°C	ISO 179	N.B.
Printing temp.	DF	250±10°C
Melting temp.	ISO 11357	180°C
Vicat softening temp.	ISO 306	38°C
Shore hardness	ISO 868	45D

Additional info:

Recommended temperature for heated bed is $\geq 100^{\circ}\text{C}$. Various other options (also without heated bed) are possible depending on the type and size of the object to be printed.

FLEX 45 can be printed better at a lower speed, due to its flexibility.

FLEX 45 can be used on most common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry ($15\text{-}25^{\circ}\text{C}$) and away from UV light. This enhances the shelf life significantly