

## Product datasheet

# **ENGLISH**

# **TPC FLEX 45**

TPC 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 TPC FLEX 45 exhibits excellent UV resistance



### Features:

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

#### **Colours:**

TPC FLEX 45 is available from stock in natural and black.

Additional info:

Recommended temperature for heated bed is  $\pm$  100°C. Various other options (also without heated bed) are possible depending on the type and size of the object to be printed.

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

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

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly

#### **Dimensions**

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

**Physical properties** 

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,14 g/cc
Melt volume flow rate	ISO 1133	39 cm³/10 min
Stress at break	ISO 527	24
Strain at break	ISO 527	530%
Tensile modulus	ISO 527	95 Mpa
Impact strength Charpy method 23°C	11 <b>27 1 7 U</b>	Notched No break
Shore D Hardness	ISO 868	45

### Thermal properties

Description	Testmethod	Typical value
Printing temp.	_	220-260°C
Melting temp.	ISO 11357	180°C

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