

FLEX 45 @df

FLEX 45 @df 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 @df exhibits excellent UV resistance.

Features:

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



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 cm ³ /10 min
Stress at break	ISO 527	24
Strain at break	ISO 527	530,00%
Tensile modulus	ISO 527	95 MPa
Impact strength Charpy method 23°C	ISO 179	Notched No break
Shore D Hardness	ISO 868	45

Colours:

FLEX 45 @df is available from stock in 5 colours.
For other colours a minimum of 30kg ± 10% is required.



Thermal properties

Description	Testmethod	Typical value
printing temp.	-	220-260° C
melting temp.	ISO 11357	180°C

Packaging:

FLEX 45 @df is available in nearly any type of packaging and labelling. Ask our team to help you customizing your product.

Additional info:

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

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

FLEX 45 @df 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.