



# Technical Document

## RS PRO - FLEX45

Stock numbers:

832-0548 / 832-0539 / 832-0535 / 832-0532 / 832-0529 / 832-0523 / 190-1947 / 190-1946

EN

RS PRO FLEX45 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 FLEX45 exhibits excellent UV resistance.

### Features:

- Very flexible - Shore 45D
- Strong
- Long term heat resistant
- Good chemical resistance
- UV resistant

### Colours:

RS PRO - FLEX45 is available from stock in a natural and black colour

### Packaging:

RS PRO - FLEX45 is available in 300, 500 grams and 1 kg packaging.



### 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	Notched No Break
Printing temp.	Print lab	245±10 °C
Melting temp	ISO 11357	180 °C
Shore hardness	ISO 868	45D

### Additional information:

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.

FLEX45 can be printed better at a lower speed, due to its flexibility.

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

- Bed adhesion: Pei sheet
- Print speed: Medium/ Low
- Fan speed: Low/ No