FLEX-45 (COD.: FLEX45)

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.

Features:
- Very flexible;
- Strong;
- Long term heat resistant;
- Good chemical resistance;
- UV resistant.

Dimensions

Size	Ø Tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%

Physical Properties

Description	Test Method	Typical Value
Specific Gravity	ISO 1183	1,14 g/cc
Melt Vol. Flow Rate	ISO 1133	39 cm³/10 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

Thermal Properties

Description	Testmethod	Typical value
Printing Temperature	-	220-260˚C
Melting Temperature	ISO 11357	180˚C

Colours:
K03011 Natural
K03012 Black

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 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 (15-25˚C) and away from UV light. This enhances the shelf life significantly.