

Technical Data Sheet



Product name: FlexiFil™

Version: v3

FlexiFil is a rubber-like high-performance and partially bio-based flexible TPC (Thermoplastic Co-Polyester) type of 3D printer filament.

FlexiFil has unique flexural strength properties, as 3D printed objects with FlexiFil will have a “flexural memory”, allowing objects to return back to their original position or shape after being bent, dent, or folded. Next to this FlexiFil offers a unique combination of flexibility, long term heat resistance, strength, excellent UV resistance and good resistance to chemicals.

Properties	Typical value	Test Method	Test condition
Physical			
Specific gravity	1.14 g/cc	ISO 1183	-
Melt flow rate	39 cm ³ /10min	ISO 1133	230° C/2.16Kg
Water absorption	± 0.69%	-	Saturated at 23° C
Moisture absorption	± 0.30%	-	Equilibrium 23° C/50% RH
Mechanical			
Impact strength	No Break	ISO 180/1A	Izod Notched @23° C (73° F)
Tensile strength	24 Mpa	ISO 527 -1/-2	Stress @ Break
Tensile modulus	95 Mpa	ISO 527 -1/-2	-
Elongation at break	530%	ISO 527 -1/-2	Nominal Strain at Break, 23° C
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	45D	ISO 868	Shore D Hardness (3s)
Thermal			
Print temperature	± 220 - 260° C	-	-
Melting temperature	± 180	ISO 11357-1/-3	10° C/min
Viscat softening temp.	± 90° C	ISO 306	VST/A/50 (50° C/h, 10N)
Optical			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance	Diameter	Tolerance	Roundness
HS Code	39169090	1.75mm ± 0.05mm	≥ 95%
REACH compliant	Yes	2.85mm ± 0.10mm	≥ 95%
RoHS certified	Yes		

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