

Technical Data Sheet



Product name: FlexiFil™

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Version: v3

FlexiFil™ is a rubber-like high-performance 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 after being bent.

The combination of flexibility, mechanical strength, durability, good resistance to chemicals, excellent UV resistance and extreme temperatures makes FlexiFil™ a unique filament.

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			
FDA compliant	Yes			

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