

Flexfill TPU 98A

Description:

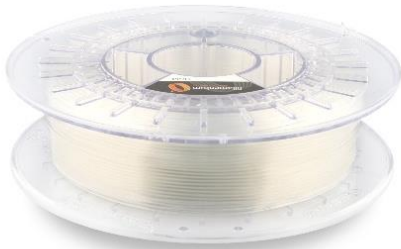
Flexfill TPU 98A is semi-flexible filament that offers specific mechanical properties. High tear and tensile strength guarantee the durability of 3D printed products.

The material is based on polyurethane, which offers highly reversible deformation, resistance to ozone, oils and greases and good transparency. Properties are stable also thanks to improved UV stability. It has high abrasion resistance and rebound resilience. Printing with 100% infill insures tough object. Material has resistance to wide range of temperatures.

This material is ideal for dynamically stressed parts, for example belts, shoe outsoles, wheels, grippers, flexible covers.

It can be used for production of electrical and electronic equipment. It doesn't contain the restricted substances. The use of the material in the food or medical industry is not recommended.

For flexible materials, Fillamentum can guarantee maximum deviation of diameter +/- 0,10 mm. During the production, filament is made with the best stability of diameter, roundness and colour.



Workability of 3D printing filament is at least 12 months from delivery.

The information was processed with the best knowledge of the manufacturer and it is for information only.

Physical properties	Typical Value	Test Method	Test Condition
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Material density	1,23 g/cm ³	ISO 1183-1	
Diameter tolerance	± 0,10 mm		
Weight	500 g of filament (+ 250 g spool)		

Mechanical properties	Typical Value	Test Method	Test Condition
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Tensile strength	53,7 MPa	DIN 53504	at break, 200 mm/min
Tensile stress	12,1 MPa	DIN 53504	10% elongation, 200 mm/min
	22,1 MPa	DIN 53504	50% elongation, 200 mm/min
	28,4 MPa	DIN 53504	100% elongation, 200 mm/min
	37,8 MPa	DIN 53504	300% elongation, 200 mm/min
Elongation at break	318 %	DIN 53504	200 mm/min
Hardness	98 Shore A	ISO 7619-1	
	60 Shore D	ISO 7619-1	
Tear strength	170 kN/m	ISO 34-1	500 mm/min
Abrasion	23 mm ³	ISO 4649	method A

Chemical properties	Typical Value	Test Method	Test Condition
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Polymer base	polyurethane		
Oils, greases and ozone resistance	good		25 °C
Water, acetone, acids, alkalis, alcohols and car fluids resistance	bad		25 °C

Printing properties	Recommended	Notes
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Print temperature	220-240 °C	Recommended settings! It may differ according to the printer and the object.
Hot pad	50-60 °C	Try your own optimization before printing.
Bed adhesive	Magigoo	For easy removing of the object.
Speed of printing	20-30 mm/s	
Fan speed	70-100 %	