Technical datasheet

ColorFabb TPU94A HH

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ColorFabb TPU94A HH is special aromatic polycarbonate-based thermoplastic polyurethane filament. It features a Shore hardness of 94A. The material is uniquely suited for parts requiring long term heat performance and flexibility. The material can be printed on most common desktop platforms.

We recommend drying the filament before processing, 4-8 hours at 70ºC. Longer might be necessary if you still notice effects relating to moisture.

TYPICAL MATERIAL PROPERTIES

Physical properties	Unit	Value	Method
Density	g/cm3		ISO 2781
Hardness (5 sec)	Shore A	94	ISO 868
Tensile Strength (XZ)	MPa	43	ISO 527
Ultimate Elongation (XZ)	%	315	ISO 527
Tensile Strength (ZY)	MPa	19	ISO 527
Ultimate Elongation (ZY)	%	190	ISO 527

- Filament dried at 70ºC during 2h in a convection oven prior to printing
- Printing conditions: Ultimaker S5, extrusion temp = 230C, fan = 20%, base = 60C, speed = 25mm/s, flow rate = 107%, layer thickness = 0.2mm, core = 0.4mm
- Prior to testing samples were conditioned at 23°C for 48 hours.

FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0,10	≥ 95%
2,85 mm	± 0,10	≥ 95%

GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	230 – 240ºC
Bed temperature	80ºC
Active cooling fan	Use the least amount of cooling for best layer-to-layer adhesion.
Print speed	20-30 mm/s

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