

Flexible 85A TDS

Thermoplastic Polyuretane (TPU) for FDM Printers

Product Description

AzureFilm flexible filament consistency and printability outperforms other polyurethane materials. With its core formula and ultra resistant materials used as base mixture, allows printing at a high speed while maintaining firm and smooth outprints. Filament can be used for most types of 3D printers, with emphasis on direct driven extruders.

Properties

Property of 3D printed specimens	Test method	Value
Material	Thermoplastic Polyuretane	Color White
Density		1,11 – 1,13 g/cm ³
Tensile modulus	ASTM D638	12 MPa
Tensile strength [Yield]	ASTM D638	4 MPa
Strain at break (Tensile)	ASTM D638	26 MPa
Elongation at yield	ASTM D638	65%
Elongation at break	ASTM D638	660%
Hardness	ASTM D2240	85-88 Shore A

Test specimens print settings

3D printer: AzureFilm	Infill: 100 %	Nozzle temperature: 230 °C
Slicer: Cura	Shells: /	Bed temperature: 60 °C
Nozzle: 0,4 mm	Layer height: 0,2 mm	Print speed: 30 mm/s

Printing Recommendations

Nozzle temperature: 200 – 240°C

Heated bed: recommended 0 – 80 °C

Print speed: 10 – 30 mm/s

Build platform: Blue tape, Kapton tape. Recommended: Glass bed + Dimafix spray