

# 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 <sup>3</sup>
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: 220 – 240°C

Heated bed: recommended 50-60 °C

Print speed: 10 – 30 mm/s

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