# Flexible 98A 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 emphasys on direct driven extruders.

## Properties

| Property of 3D printed <br> specimens | Test method | Value |
| :---: | :---: | :---: |
| Material | Thermoplastic Polyuretane | Color White |
| Density | DIN 53516 | $1,15-1,17 \mathrm{~g} / \mathrm{cm} 3$ |
| Tear strenght | DIN 53515 | $120 \mathrm{~N} / \mathrm{MM}$ |
| Tensile modulus 300\% | DIN 53515 | 15 MPa |
| Tensile strength | DIN 53504 | 45 MPa |
| Abrasion resistance | DIN 53516 | 30 mm 3 |
| Elongation at break | DIN 53504 | $350 \%$ |
| Hardness | DIN 53505 | 98 Shore A |

## Test specimens print settings

3D printer: AzureFilm
Slicer: Cura
Nozzle: 0,4 mm

Infill: 100 \%
Retraction: 0
Layer height: 0,2 mm

Nozzle temperature: $230^{\circ} \mathrm{C}$ Bed temperature: $60^{\circ} \mathrm{C}$
Print speed: $30 \mathrm{~mm} / \mathrm{s}$

## Printing Recommendations

Nozzle temperature: $200-240^{\circ} \mathrm{C}$
Heated bed: recommended $0-80^{\circ} \mathrm{C}$
Print speed: $10-30 \mathrm{~mm} / \mathrm{s}$
Build platform: Blue tape, Kapton tape. Recommended: Glass bed + Dimafix spray

