





# Ultrafuse<sup>®</sup> TPU 85A

Flexible Filament based on BASF Elastollan®

Ultrafuse<sup>®</sup> TPU 85A was specially developed for FFF printing and is an advanced fi lament based on BASF's Elastollan<sup>®</sup> materials. Elastollan<sup>®</sup> is the brand name for thermoplastic polyurethane (TPU) by BASF. It stands for maximum reliability, consistent product quality, and cost efficiency.

Ultrafuse<sup>®</sup> TPU 85A offers a broad range of degrees of hardness with different designs, making this filament an idea material in applications where specific degrees of flexibility are critical.

## Benefits at a Glance

- High wear and abrasion resistance
- Very good low-temperature flexibility
- High tensile strength and outstanding resistance to tear propagation
- Excellent damping characteristics
- High resistance to oils, greases, oxygen and ozone

# **Example Applications**

- Functional flexible parts
- Footwear, sports and leisure
- Automotive, industrial manufacturing, agriculture, and construction

#### **Material Properties**

Shore A hardness	85
Abrasion resistance	82 mm3
Compression set at 23°C, 72 h:	26%
Stress at break:	34 MPa (XY), 10 MPa (ZX)
Elongation at break:	600 % (XY), 320% (ZX)
Tear strength:	80 kN/m (XY), 18 kN/m (XZ), 30 kN/m (ZX)

### **Printing Guidelines**

Nozzle Temperature	200-220 °C
Bed Temperature	40 °C
Nozzle Diameter	0.4 mm
Bed Modification	Glass
Print Speed	15-40 mm / sec

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