

TECHNICAL DATA SHEET Inslogic TPU90A Filament



Inslogic TPU90A Filament is softer and offers greater flexibility. It features excellent wear resistance and outstanding aging performance, making it less prone to yellowing and cracking. Ideal for applications that require both flexibility and strength, such as wearable devices, protective cases and sporting goods.

Key Features

- Shore hardness 90A, high elasticity and wear
- Resistance 99.9% effective antibacterial and anti-mold properties for long-lasting
- Cleanliness Excellent aging resistance, extended service life

Applications

- Soft-touch multi-material models or handles
- Mechanical parts
- Protective covers, safety covers & bumpers
- Springs, seals & shock absorbers
- Wheels and rollers
- Shoe soles, watch straps



Specifications

Material Name	Inslogic TPU90A
Diameter	1.75 ± 0.03 mm
Net Filament Weight	1 kg

Recommended Print Settings

Drying Settings	50 °C, 4 h
Nozzle Size	0.4, 0.6 mm
Nozzle Temperature & Printing Speed	220 - 240°C ≤40mm/s
Bed Temperature	30 -60 °C
Cooling Fan Speed	100%
Bed Type	Textured PEI sheet, Cool Plate

Physical Properties

Property	Method	Metric
Density	ISO 1183	1.17 g/cm ³
Shore Hardness	ISO868	90A
Heat Deflection Temperature at 0.45 MPa	ISO 75	36 °C



Mechanical Properties

Property	Method	Metric
Tensile Strength	ISO 527/2	30 MPa
Elongation at Break	ISO 527/2	$\geq 1000\%$
Young's Modulus	ISO 178	/
Flexural Strength	ISO 178	/
Izod Impact, Notched	ISO 180	No Break



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