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TECHNICAL DATA SHEET Inslogic TPU 95A Filament



Inslogic TPU 95A offers a soft, flexible material that creates strong, durable objects capable of flexing, bending, and returning to their initial form. Its high resistance to abrasion and wear makes it popular in various industries, including medical instruments, automotive parts, sporting goods, and protective cases.

Key Features

- Strong layer bonding
- Good flexibility with rubber-like texture
- High resistance to abrasion, wear & tear
- Soft yet strong toughness
- Chemical resistance
- Maximum elongation of 536%

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

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Specifications

Material Name	Inslogic TPU 95A
Chemical Name	Thermoplastic Polyurethane
Diameter	1.75 ± 0.03 mm
Net Filament Weight	1 kg

Recommended Print Settings

Drying Settings	70 - 80 °C, 4h
Nozzle Size	0.2, 0.4, 0.6 mm
Nozzle Temperature & Printing Speed	190 - 210 °C at 50 - 80 mm/s 210 - 230 °C at 80 - 120 mm/s
Bed Temperature	50 - 60 °C
Cooling Fan Speed	100%
Bed Type	Textured PEI Sheet, Cool Plate

Physical Properties

Property	Method	Metric
Density	ISO 1133	1.23 g/cm3
Heat Deflection Temperature at 0.45 MPa	ISO 75	52 °C
Shore Hardness	ASTM D2240	95A

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Mechanical Properties

Property	Method	Metric
Tensile Strength	ISO 527/2	34.4 MPa
Elongation at Break	ISO 527/2	1063%
Young's Modulus	ISO 527/2	50.2 MPa
Flexural Strength	ISO 178	4.26 MPa
Flexural Modulus	ISO 178	87.6 MPa
Izod Impact, Notched	ISO 180	No Break

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