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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



Specifications

Material Name	Inslogic TPU 95A
Chemical Name	Thermoplastic Polyurethane
Diameter	1.75 ± 0.02 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	195 - 205 °C
Bed Temperature	20 - 40 °C
Printing Speed	30 mm/s
Cooling Fan Speed	70%
Bed Type	Textured PEI Sheet, Cool Plate

Physical Properties

Property	Method	Metric
Density	ASTM D792	1.23 g/cm3
Heat Deflection Temperature at 0.45 MPa	ASTM D648	52 °C
Shore Hardness	ASTM D2240	95A



Mechanical Properties

Property	Method	Metric
Tensile Strength	ASTM D638	21.7 MPa
Elongation at Break	ASTM D638	536%
Young's Modulus	ASTM D638	50.2 MPa
Flexural Strength	ASTM D790	4.26 MPa
Flexural Modulus	ASTM D790	87.6 MPa
Izod Impact, Notched	ASTM D256	No Break

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