

TPU 95A

FLEXIBLE PLASTICS FOR FDM 3D PRINTING



MATERIAL NAME

TPU 95A

COLOR

White &Black&Red&Blue

PROCESS

FDM

PRODUCT DESCRIPTION

TPU 95A is a high-performance thermoplastic polyurethane (TPU) filament designed for industrial-grade FDM 3D printing applications. It combines the flexibility of rubber with the strength and durability of plastic, making it an ideal solution for making functional parts that require elasticity and impact resistance.

TYPICAL APPLICATIONS

- End-use plastic parts
- Assembly testing
- Functional prototype testing
- Flexible sealing/cushioning

PRODUCT SAFETY

Flexible printed parts should be handled according to normal workshop safety practices. Avoid prolonged skin contact with uncured resin or residues, and review material-specific handling and operating requirements before use.

PRODUCT DELIVERY & WAREHOUSING

- **STORAGE**

Store flexible printed parts in a cool, dry, and dark environment. Keep away from solvents, direct sunlight, ozone sources, and sustained compression.

- **TRANSPORTATION**

Ship with cushioning to avoid compression set, tearing, and surface abrasion. Protect from heat, UV exposure, and chemical contamination during transit.

PROPERTIES OF PRINTED MATERIAL

Properties	Test Method	Value
Density (g/cm ³)	ISO 1183	1.22 g/cm ³
Water Absorption (%)	ISO 62	0.5~1.2%
Hardness	ISO 7619-1	Shore A 95
Tensile strength (MPa)	ISO 37	XY: 23.7 ± 2.1 Z: 6.4 ± 0.5 MPa
Tensile modulus (MPa)	ISO 37	XY: 67 ± 6 Z: 56 ± 3 MPa
Elongation at break	ISO 37	XY>560 Z: 82.3 ± 18.4%
Flexural strength (MPa)	ISO 178	XY: 4.1 Z: 4.3 MPa
Flexural modulus (MPa)	ISO 178	XY: 62.6 ± 1.7 Z: 62.6 ± 2.0 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 50.3 ± 1.1 deg C
Impact strength notched	ISO 179	36.0 ± 6.6 KJ/m ² ; ISO 179 (Charpy)

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>



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China's leading digital manufacturing platform, combining in-house 3D printing and CNC machining with a vetted supplier network for rapid prototyping and on-demand production

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