

ESSENTIUM TPU 95A LF

Essentium's TPU 95A Low Friction is the medium durometer filament in our broad flexible portfolio. It balances high elongation with impressive impact resistance and tensile strength. This filament has a low friction surface that allows for easier feeding while printing.

RECOMMENDED PRINT SETTINGS

Nozzle Temperature, °C	230 – 250	Ex. Multiplier (Flow)	1.03
Bed Temperature, °C	50 – 80	Fan Speed, %	0 – 20
Print Speed, mm/s	20 – 40	Retraction Speed, mm/s	Standard
First Layer Speed, mm/s	15 – 20	Retraction Distance, mm	Standard

MATERIAL PROPERTIES

Property	Test Method	Value
Shore Hardness	ISO 868	96A
Specific Gravity	ISO 1183	1.15
Tear Strength, kN/m	ISO 34-1	100
Abrasion Loss, mm ³	ISO 4649	25
Compression Set at RT	ISO 815	30
Compression Set at 70°C	ISO 815	45

**Based on injection molded properties*

PRINT PARAMETERS*

Nozzle Temperature, °C	240
Bed Temperature, °C	80
Print Speed, mm/s	40
Layer Height, mm	0.35
Ex. Multiplier (Flow)	1.05
Fan Speed, %	0
Machine	Ultimaker 3
Nozzle Size, mm	0.8

**Print parameters in reference to mechanical properties*

MECHANICAL PROPERTIES

Property	Test Method	Print Orientation		
		XY	YX	ZX
Tensile Strength, MPa	ASTM D638	27	26	7
Elongation at Break, %	ASTM D638	458	460	33