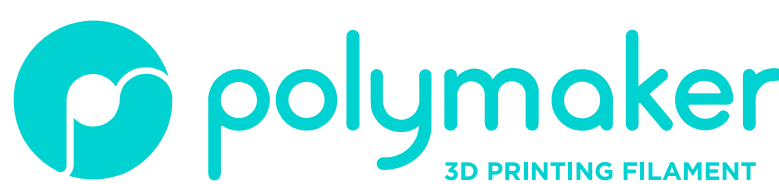


TECHNICAL DATA SHEET



V5.5



PolyFlex™ TPU95-HF

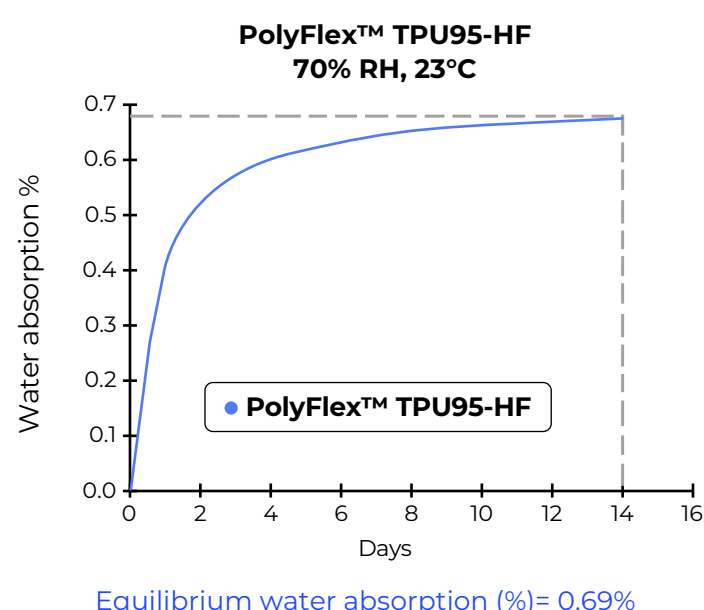
PolyFlex™ TPU95-HF, created from Covestro's Addigy® family, is a TPU with high flow properties making it ideal for high-speed printing. Combined with its UV resistance, PolyFlex™ TPU95-HF unlocks new applications for flexible materials in manufacturing.

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PHYSICAL PROPERTIES

PROPERTY	TESTING METHOD	TYPICAL VALUE
Density	ISO1183, GB/T1033	1.16 g/cm ³ at 3°C
Melt index	210°C, 2.16kg	9.3 g/10min
Light transmission	N/A	N/A
Flame retardancy	N/A	N/A

MOISTURE ABSORPTION CURVE



MECHANICAL PROPERTIES

PROPERTY	TESTING METHOD	TYPICAL VALUE
Stress at 100% strain (X-Y)	ISO 37, GB/T 528	15.5 ± 0.7 MPa
Stress at 200% strain (X-Y)	ISO 37, GB/T 528	19.9 ± 0.8 MPa
Stress at 300% strain (X-Y)	ISO 37, GB/T 528	23.0 ± 0.5 MPa
Stress at 400% (X-Y)	ISO 37, GB/T 528	24.2 ± 0.6 MPa
Tensile strength (X-Y)	ISO 37, GB/T 528	26.6 ± 0.6 MPa
Elongation at break (X-Y)	ISO 37, GB/T 528	495.8 ± 16.2%
Shore hardness (Z)	ISO 7619-1, GB/T 531.1	95A

CHEMICAL RESISTANCE DATA

PROPERTY	TYPICAL VALUE
Effect of weak acids	Fair
Effect of strong acids	Poor
Effect of weak alkalis	Fair
Effect of strong alkalis	Poor
Effect of oils and grease	Good

Good:
Material may get minor attack after long periods of storage with chemical at ambient temperature

Fair:
Material can be used for short time contact with chemicals at ambient temperature

Poor:
Material becomes unstable on contact with chemical at ambient temperature

RECOMMENDED PRINTING CONDITIONS

Nozzle temperature	200-230°C
Build plate temperature	25-50°C
Build surface treatment	PC and Textured PEI
Cooling fan	ON
Closure chamber	Not needed

Printing Speed	30-100mm/s
Drying temp. and time	70°C/8H
Retraction distance	3-6 (mm)
Retraction Speed	40-60 (mm/s)

*Based on 0.4mm nozzle. Printing conditions may vary with different nozzle diameters.



PolyDissolve™ S1
Recommended support material
Store in the resealable bag



PolyBox™ or PolyDryer™ Box
Highly Recommended storage
for excellent printing quality

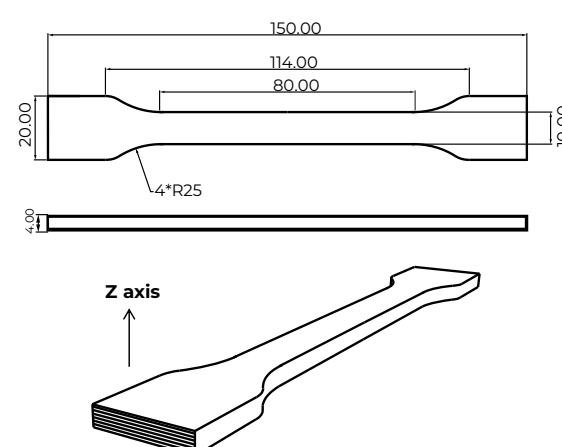
HOW TO MAKE SPECIMENS

Printing temperature	220°C
Bed temperature	60°C
Top & bottom layer	3
Environmental Temperature	Ambient

Infill	100%
Shell	2
Cooling fan	ON

TENSILE TESTING SPECIMEN

ISO 527, GB/T 1040



*Based on testing with Polymaker™ PolyFlex TPU95-HF (SKU: PD03001)

DISCLAIMER

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice. Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of Polymaker™ materials for the intended application. Polymaker™ makes no warranty of any kind, unless announced separately, to the fitness for any use or application. Polymaker™ shall not be made liable for any damage, injury or loss induced from the use of Polymaker™ materials in any application.