
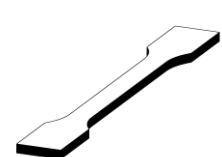


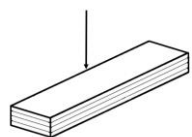
Technical Data Sheet

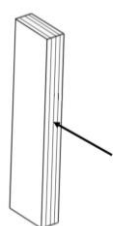
H-TECK

IDENTIFICATION	
Commercial name	H-Teck
Raw Material	Polyphenylene Sulfide (PPS)
Use	3D printing applications
Manufacturer	FiberForce Italy srl – Vicolo Del Cristo 4, 31100 Treviso (ITALY)

PHYSICAL PROPERTIES	VALUE	STANDARD
Density	1,27 g/cc	ISO 1183

MECHANICAL PROPERTIES		
TENSILE TEST – STANDARD ISO 527		
Test specimens printed on Ultimaker with the following setup: <ul style="list-style-type: none"> - Nozzle Temperature: 310 °C - Heat bed Temp: 90 °C - Print speed: 40 mm/s - Infill orientation: 45° 	 xz	 xy
	Infill	100%
Tensile strength (Mpa)	22,10	51,28
Elastic Modulus (Mpa)	1562	2085
Elongation at break (%)	3,52	5,68
Energy at break (J)	1,58	7,72

FLEXURAL TEST – STANDARD ISO 178	
Test specimens printed on Ultimaker with the following setup: <ul style="list-style-type: none"> - Nozzle Temperature: 310 °C - Heat bed Temp: 90 °C - Print speed: 40 mm/s - Infill orientation: 45° 	xy- normal
	
Infill	100%
Flexural strength (Mpa)	79,32
Flexural Modulus (Mpa)	1785,6
Deformation (%)	6,63

IMPACT TEST IZOD – STANDARD ISO 180	
Test specimens printed on Ultimaker with the following setup: <ul style="list-style-type: none"> - Nozzle Temperature: 310 °C - Heat bed Temp: 90 °C - Print speed: 40 mm/s - Infill orientation: 45° 	xy- parallel
	
Infill	100%
Impact strength (KJ/m ²)	78,2
Impact Energy (J)	3,19

THERMAL PROPERTIES	VALUE	STANDARD
Melting Point	280 °C	ISO 11357
Heat Deflection Temp.@1,82 MPa	108 °C	ISO 75

OTHER PROPERTIES	VALUE	STANDARD
Flammability	V-0	UL94

FILAMENT SPECIFICATIONS AND PRINT SETTINGS	
Diameter 1.75mm	1.75 ± 0.05 mm
Diameter 2.85mm	2.85 ± 0.10 mm
Roundness deviation	max 2%
Suggested Print Temperature	300 - 315 °C
Suggested Print Speed	40 mm/s
Suggested Bed Temperature	90 – 100 °C