

## Facilan™ HT

Facilan™ HT is a material with a heat deflection temperature of 89 °C and comparatively high tensile strength. The raw material has food contact approval and is not based on Bisphenol-A. Facilan™ HT has been created as a higher performance replacement for PET, PET-G and other copolymers. High stiffness, high strength and high gloss combine to give this material good characteristics to be used in machine building, construction and for end use consumer parts. HT has been created to make parts that survive real life.

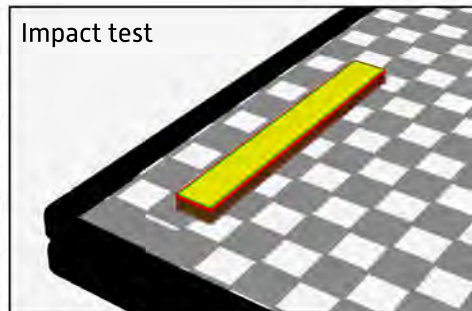
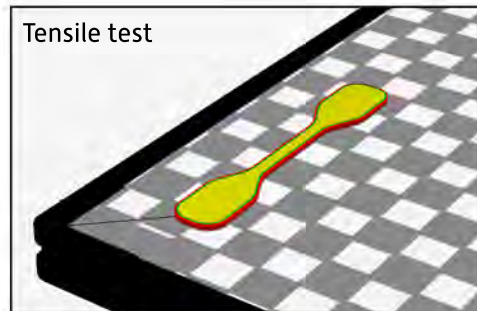
MATERIAL PROPERTIES	TYPICAL VALUE	TEST METHOD
Density	1.3 g/cm <sup>3</sup>	ISO 1183-1
Tensile Strength	62 MPa	ISO 527-1*
Elongation at yield	7 %	ISO 527-1*
Tensile Modulus	2100 MPa	ISO 527-1*
Flexural Strength	85 MPa	ISO 178
Flexural Modulus	2300 MPa	ISO 178
Izod impact strength (notched)	3 kJ/m <sup>2</sup>	ISO 180-1
Shore D Hardness	76	ISO 868
Heat Deflection Temperature	89°C	ISO 75 B**

\*Tensile sample thickness 1.5 mm

\*\* 120 K/h

PRINT RECOMMENDATIONS	
Nozzle Temperature	240 - 250 °C
Bed Temperature	75 - 85 °C
Print Speed	40 - 70 mm/s
Bed Adhesion	PEI Sheet / Glass

Disclaimer : 3D4Makers makes no warranties what so ever, either expressed or implied, including but not limited to, any implied fitness for any particular purpose. From the moment the product is shipped it is beyond our control. The information in this document is believed to be correct at the time of writing. However, handling, processing, settings, the type of 3D printer, slicing and other variables are completely up to the user. The method through which the product is used can be varied. It is up for the customer to determine how it is 3D printed and whether it is fit for purpose or suited to a particular application.



- Printer : Ultimaker 2
- Nozzle temp : 240°C
- Bed temp : 80°C
- Infill : 100%
- Layerheight : 0.1 mm
- Print speed : 50 mm/s
- Wall thickness : 0.7 mm
- Wall line count : 2

Additional info : For many 3D printers, HT will print best at approximately 240°C with a bed temperature of 80°C and a speed of 50 mm/s. In designs with significant overhangs and bridges best results are obtained with fans at 80%. If your model has no overhangs then putting your fans at 0% improves interlayer bonding and in so doing the final mechanical strength of your part. To get the best results while printing we advise you to keep the 3D printer in a room where there is hardly any draft and/or temperature fluctuations. Keep the 3D printer out of direct sunlight. When the 3D printer is not being used it is important to keep the 3D4Makers Facilan™ HT filament in a bag and stored in a cool, dry and dark place until it is used again.