

Date of issue: September 29, 2022  
Version: v1.0

Meet our new generation LW-PLA-HT. This formulation features an increased temperature resistance compared to our generic LW-PLA. Thin printed structures will be able to handle heat from external sources such as the sun much better and prolong the time until failure. Not convinced? Check out our comparison video in the image gallery between regular LW-PLA and LW-PLA-HT. Our LW-PLA-HT is the best filament for printing RC Planes, Cosplay and other light weight items. Parts are feather light, yet retain good strength and are easy to cut, trim and sand.

### TYPICAL MATERIAL PROPERTIES – 3D Printed

Physical properties	Unit	Value @ 210;	Value @ 230;	Method
		100% flow	60% flow	
Tensile modulus	MPa	2979.13	1053.81	ISO 527
Yield strength	MPa	33.81	8.80	ISO 527
Yield strain	%	1.63	1.14	ISO 527
Tensile strength	MPa	33.81	8.85	ISO 527
Tensile strain at tensile strength	%	1.63	1.14	ISO 527
Tensile stress at break	MPa	30.15	8.21	ISO 527
Tensile strain at break	%	3.03	1.80	ISO 527
Charpy unnotched impact strength	kJ/m2	12.6	2.81	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m2	2.61	0.94	ISO 179-1/1 eU
HDT	°C	71,18*	-	ISO 75

\*HDT data is measured under and external load. Without an external load, LW-PLA-HT reaches even higher temperature resistance

# Technical datasheet

## LW-PLA-HT

color**Fabb**

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### FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0.1mm	≥ 95%
2,85 mm	± 0.1mm	≥ 95%

**Netto filament weight** 750g

### GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	195 - 240°C
Bed temperature	50-60°C (if you have one, not strictly necessary)
Bed surface / modification	-
Bed adhesion slicer settings	-
Cooling	-
Print speed	40-100 mm/s
Layerheight	0.2 mm (for 0.4mm nozzle)

For printing thin structures such as RC plane parts we recommend printing the first layer at 100% flow using 200C printing temperature. Then increase the temperature for the second layer (around 235C) to activate the foaming and reduce flow to 50-60%.

#### Disclaimer

The product- and technical information provided in this datasheet is correct to the best of our knowledge. The information given is provided as a guidance for good use, handling and processing and is not to be considered as a quality specification. The information only relates to the specific product and the material properties.