

# FilaPrint Copper

The FilaPrint 80% Copper filled PLA based filament is very easy to print, sand & polish. With FilaPrint PLA Copper you can create the most beautiful objects with real METAL characteristics, with 3 x higher weight than PLA, plus a METAL feel & touch and thermo-conductivity and due to the high percentage of fillers FilaPrint Copper has virtually no shrinkage. A special lubricant increases the flow and prevents FilaPrint Copper adhering to the nozzle.

Finally all above benefits combined with the correct hardness results in a filament that can be printed on almost every type of FDM 3d printer available on the market with retraction enabled on nozzles  $\geq 0.35\text{mm}$ .

## Features:

Approx. 80% Copper content • PLA-based, 3 times heavier  
Metal feel & “cold” touch

Excellent printability on both direct & Bowden style 3D printers

Processing additive added for easy & reliable printing

Quick & easy polishing and other post-processing. Possibility to print with retraction

Works on nozzles  $\geq 0.35\text{ mm}$



Printed

Sanded & Polished

Patinated

## Filament specs.

Size	Ø tolerance	Roundness
1,75mm	$\pm 0,05\text{mm}$	$\geq 95\%$
2,85mm	$\pm 0,10\text{mm}$	$\geq 95\%$

## Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	3,41 g/cc
MFR 190°C/2,16 kg	-	n.a.
Tensile strength at yield	ISO 527	18,3 Mpa
Strain at break	ISO 527	4.5%
Tensile Modulus	ISO 527	4210 Mpa
Impact strength - Izod method 23°C	ISO 180/A	9,3 kJ/m <sup>2</sup>
Printing temp.	DF	195-220°C
Melting temp.	ISO 294	195°C $\pm$ 10°C
Vicat softening temp.	ISO 306	65°C

## Additional info:

FilaPrint PLA Copper can be printed without a heated bed, if you do have a heated platform you can set it to  $\pm 35\text{-}60^\circ\text{C}$ . **Storage** and dry (15-25°C) and away from UV light as this enhances the shelf life significantly.

\*Please consider the use of a hardened steel nozzle when printing with FilaPrint PLA Copper. The Copper powder inside makes filament abrasive and will result in fast wear of regular Copper nozzles.

\* Please have a look at the Printing, post-processing & other info document below for further tips & tricks.