

Technical Data Sheet



Product name: MetalFil™ - Classic Copper

Date of issue: 8 July 2016

Version: v2

MetalFil™ - Classic Copper is an incredible new metal-filled PLA-based filament with approximately 80% of copper filling. This incredible high filling with copper powders enables every FDM 3D printer user to 3D print copper objects which are almost indistinguishable from genuine copper casted objects.

MetalFil™ - Classic Copper is a printer- and user friendly metal-filled filament and 3D printed objects can very easily be post-processed allowing one to create amazing copper objects with various patina effects.

Properties	Typical value	Test Method	Test condition
Physical			
Specific gravity	3.4 g/cc	ISO 1183	-
Melt flow rate	-	-	-
Water absorption	-	-	-
Moisture absorption	-	-	-
Mechanical			
Impact strength	9.3 KJ/m ²	ISO 179	Charpy Notched @23° C (73° F)
Tensile strength	18.3 Mpa	ISO 527	@Yield 50mm/min (2 inch/min)
Tensile modulus	4210 Mpa	ISO 527	1mm/min
Elongation at break	4.5%	ISO 527	@ Break 50mm/min (2 inch/min)
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	-	-	-
Thermal			
Print temperature	± 190 - 220° C	-	-
Melting temperature	± 210 ± 10° C	ISO 294	-
Viscat softening temp.	± 66° C	ISO 306	VST/A/50 (50° C/h, 10N)
Optical			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance		Diameter	Tolerance	Roundness
HS Code	39169090	1.75mm	± 0.05mm	≥ 95%
REACH compliant	Yes	2.85mm	± 0.10mm	≥ 95%
RoHS certified	Yes			
FDA compliant	No			

Formfutura VOF	CoC: 55502105	Tel: +31 (0)85 002 0881
Groenestraat 215	VAT: NL851741083B01	Email: info@formfutura.com
6531 HH Nijmegen	EORI: NL851741083	Website: www.formfutura.com
The Netherlands		

All information supplied by or on behalf of Formfutura in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but Formfutura assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the forementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.