

# Technical Data Sheet



**Product name: MetalFil™ - Brass**

MetalFil - Brass is a metal-filled PLA-based filament with approximately 70% of gravimetric brass filling. This incredible high filling with brass powders enables every FDM 3D printer user to 3D print brass objects which are almost indistinguishable from genuine brass casted objects.

MetalFil - Brass is easy to print and can be printed on full metal, PEEK, and PTFE hotends and can perfectly be printed with  $\geq 0.4$ mm nozzles with retraction settings enabled on both direct drive extruders, as well as on Bowden style extruders, which is a truly unique feature for a metal-filled filament. MetalFil Brass printed objects are extremely easy to polish.

Properties	Typical value	Test Method	Test condition
<b>Physical</b>			
Specific gravity	2.78 g/cc	ISO 1183	-
Melt flow rate	-	-	-
Water absorption	-	-	-
Moisture absorption	-	-	-
<b>Mechanical</b>			
Impact strength	-	-	-
Tensile strength	-	-	-
Tensile modulus	-	-	-
Elongation at break	-	-	-
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	-	-	-
<b>Thermal</b>			
Print temperature	$\pm 180 - 195^\circ \text{C}$	-	-
Melting temperature	$\pm 195 \pm 10^\circ \text{C}$	ISO 294	-
Viscat softening temp.	$\pm 65^\circ \text{C}$	ISO 306	VST/A/50 (50° C/h, 10N)
<b>Optical</b>			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance		Diameter	Tolerance	Roundness
HS Code	39169090	1.75mm	$\pm 0.05\text{mm}$	$\geq 95\%$
REACH compliant	Yes	2.85mm	$\pm 0.10\text{mm}$	$\geq 95\%$
RoHS certified	Yes			

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