

1471 US HWY 51 Stoughton WI 53589 USA info@thevirtualfoundry.com +1 (608) 509-7146

SECTION 1 - IDENTIFICATION

COMPANY ADDRESS:

The Virtual Foundry, Inc 1471 US HWY 51 Stoughton, WI 53589 USA

PRODUCT NAME: Bronze Filamet™

SECTION 2 - TYPICAL MATERIAL PROPERTIES

Physical Properties		Unit	Value	
Density		g/cc	4.29 - 4.50	
Humidity Absorption		%	No information available	
Tensile Strength		MPa	No information available	
Tensile Elongation		%	No information available	
Flexural Strength		MPa	No information available	
Flexural Modulus		GPa	No information available	
Izod Impact Strength		kJ/m²	No information available	
SECTION 5 - FILAMENT SPECIFICATIONS				
Nominal Diameter	Diameter Tolerance	Ovality		
1.75mm	± 0.05mm	≥ 95%		
2.85mm	± 0.05mm	≥ 95%		
Net Filament Weight		Metal Content		
1000/500 grams			88.0 - 90.0%	
SECTION 6 - GUIDELINES FOR PRINTING				
Advised Printing Temperature		190-230°C (37	74 – 446°F)	
Advised Build Plate Temperature		40-65°C (104 – 149°F) (Optional) 65°C (149°F) is recommended for glass/G10 build plates		
Build Plate Surface Type		Powder coated spring steel, glass, G10, blue painter's tape		
Build Plate Preparation		Powder Coated Spring Steel: No preparation required Glass/G10: Clean with IPA, print at 65°C (149°F) PEI/PC/Fiberglass/Acrylic/Other: Blue painter's tape		



1471 US HWY 51 Stoughton WI 53589 USA info@thevirtualfoundry.com +1 (608) 509-7146

Print Cooling	Recommended for small details/intricate parts	
Advised Printing Speed	60-80mm/sec	
Nozzle Size/Type	0.6mm Hardened Steel	
SECTION 10 - ADDITIONAL INFORMATION		

This filament is abrasive and will wear standard brass nozzles fast. The Virtual Foundry, Inc recommends a hardened steel nozzle. Gem tipped, stainless steel, titanium and tungsten nozzles have been tested and found to wear quickly.

Sintering Temperature: 885°C (1625°F)

Instructions: <u>https://thevirtualfoundry.com/debind-sinter/</u>

DISCLAIMER: The information provided in this TDS is correct to the best of The Virtual Foundry, Inc's knowledge. The Virtual Foundry, Inc makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. 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 user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. The information only relates to the specific product and the material properties.

REVISED DATE:

April 2024