1471 US HWY 51
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SECTION 1 - IDENTIFICATION

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

PRODUCT NAME: **Magnetite Filamet™**

SECTION 2 - TYPICAL MATERIAL PROPERTIES

Physical Properties	Unit	Value
Filament Density	g/cc	-
Ceramic Content	%	76.0 – 81.0

SECTION 3 - FILAMENT SPECIFICATIONS

Nominal Diameter	Diameter Tolerance	Ovality	Net Filament Weight
1.75mm	± 0.05mm	≥ 95%	500 / 250 grams
2.85mm	± 0.05mm	≥ 95%	500 / 250 grams
Pellets	-	-	1000 grams

SECTION 4 - GUIDELINES FOR PRINTING

Advised Printing Temperature	190 – 230°C (374 – 446°F) For high speed printers: 235 – 250°C (455 – 482°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: Ensure surface is clean and free of debris Glass/G10: Clean with IPA, print at 65°C (149°F) Other: Blue painter's tape
Print Cooling	Recommended for small details/intricate parts
Advised Printing Speed	60 – 80mm/sec For high speed printers: 120 – 150mm/sec
Advised Flow Rate	110 – 125%
Nozzle Size/Type	0.6mm Hardened Steel

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SECTION 5 - ADDITIONAL INFORMATION

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

Sintering Temperature: 1,000°C (1832°F) Untested

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REVISED DATE: November 2026