

# TECHNICAL DATA SHEET

### Pure Iron Filamet™

Physical Properties	Unit	Value
Density	g/cc	2.81
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 2 - FILAMENT SPECIFICATION**

Nominal Diameter	Diameter Tolerance	Ovality
1.75mm	± 0.05	≥ 95%
2.85mm	± 0.05	≥ 95%

Net Filament Weight Metal Content

1000 / 500 grams 81.7%

## **SECTION 3 - GUIDELINE FOR PRINT SETTINGS**

Advised Printing Temperature 205 - 235°C

Advised Build Plate Temperature 40 - 50°C

Build Plate Surface Type Glass / PEI / G10 / Powder Coated Spring Steel

Build Plate Preparation Blue Painter's Tape (on PEI/G10) - Nothing needed for Powder Coated

Spring Steel and Glass

Print Cooling None Required

Advised Printing Speed 60mm/sec (3600mm/min)

Nooze Size/Type 0.8mm / Hardened Steel

## **SECTION 4 - ADDITIONAL INFORMATION**

**Sintering Temperature:** 1250-1350°C (2282-2462°F)

This filament is abrasive and will wear standard brass nozzles fast. The Virtual Foundry, Inc recommends a hardened steel nozzle. A Filawarmer is not required for this filament.

**DISCLAIMER:** The product and technical information provided in this datasheet is correct to the best of The Virtual Foundry, Inc's knowledge. 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 information only relates to the specific product and the material properties.