

# TECHNICAL DATA SHEET

## High Carbon Iron Filamet™

Physical Properties	Unit	Value
Density	g/cc	2.75
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 80%

#### **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/Fiberglass/Spring Steel

Build Plate Preparation Glue Stick (on glass) Blue Painter's Tape (on PEI/Fiberglass) - Nothing needed for Powder

Coated Spring Steel

Print Cooling None

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

Nooze Size/Type 0.8mm/Stainless Steel or harder

### **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.