

Technical datasheet

colorFabb XT-CF20

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ColorFabb XT-CF20 is a high quality Amphora copolyester based 3D printing filament, loaded with 20% carbon fibers, perfect for parts needing high stiffness. ColorFabb XT-CF20 has a beautiful matte surface finish when printed.

TYPICAL MATERIAL PROPERTIES

Physical properties	Unit	Value	Method
Density	g/cm ³	1,35	ISO 1183
Humidity absorption (23°C,50%RH)	%	---	
Tensile Strength	MPa	76	ISO 527
Tensile Elongation@break	%	7,5	ISO 527
Flexural Strength	MPa	110	ISO 178
Flexural Modulus	GPa	6,2	ISO 178
Izod Impact strength, notched	kJ/m ²	6	ISO 180
Izod Impact strength, unnotched	kJ/m ²	60	ISO 180

FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0,05	≥ 95%
2,85 mm	± 0,05	≥ 95%

Netto filament weight 750 grams / 2200 grams

GUIDELINE FOR PRINT SETTINGS

Advised 3D printing temperature	240 – 260 °C
Advised bed temperature	60 – 70 °C
Bed surface / modification	Glass plate
Active cooling fan	50%
Advised 3D printing speed	40 – 70 mm/sec

ADDITIONAL INFORMATION

A special point of attention is the abrasive nature of the carbon fibers. In general these fibers will accelerate the nozzle-wear of brass nozzles, much faster than unfilled filaments. Therefore colorFabb recommends to use nozzle's from Stainless steel or hardened copper alloys

Disclaimer

The product- and technical information provided in this datasheet is correct to the best of our 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.