Technical datasheet

nGen-CF10

colorFabb

Date of issue: October 27 , 2022

Version: v1.0

Our great all-round 3D printing filament just got better with the addition of a chopped carbon fiber blend. nGen-CF10 retains good toughness and adds the matte carbon fiber high quality surface finish look to your 3D printed parts. This filament is very easy to print and requires little to no adjustments compared to printing regular nGen.

TYPICAL MATERIAL PROPERTIES – 3D Printed			
Physical properties	Unit	Value	Method
Tensile modulus	MPa	2945,78	ISO 527
Yield strength	MPa	54,30	ISO 527
Yield strain	%	3,75	ISO 527
Tensile strength	MPa	54,71	ISO 527
Tensile strain at tensile strength	%	3,66	ISO 527
Tensile stress at break	MPa	52,26	ISO 527
Tensile strain at break	%	4,56	ISO 527
Charpy notched impact strength	kJ/m2	2,06	ISO 179-1/1 eU

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FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0,05	≥ 95%
2,85 mm	± 0,10	≥ 95%

Netto filament weight 750g

GUIDELINE FOR PRINT SETTINGS

Nozzle temperature 220 - 230°C*
Bed temperature 75 - 85°C

Bed surface / modification

Active cooling fan 0-80%**
Print speed 40-70 mm/s

Notes

The reported properties are an average of a batch of 3D printed specimens. The specimens have been printed in XY plane, using 0.15mm layerheight, 100% infill, 0.4mm nozzle, 230 °C nozzle temperature and 80 °C bed temperature.

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.

^{*} Please note: 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. We recommend to use from stainless steel nozzles or nozzles made with hardened copper alloys.

^{**} For best possible layer-to-layer adhesion it's recommended use the minimum amount of fan cooling needed.