

Technical datasheet

glowFill

Date of issue: April 8, 2020
Version: v1.0



Colorfabb developed its own unique PLA blend for 3D printing, namely PLA/PHA. The added concentrated phosphorescent pigment will make the material glow in the dark.

Warning: Printing a lot with glowFill can cause wear to standard brass nozzles. We would recommend users to use more wear resistant nozzles such as hardened steel or ruby tipped nozzles when printing a lot of glowFill.

TYPICAL MATERIAL PROPERTIES

Physical properties	Unit	Value	Method
Density	g/cm ³	1,24	ISO 1183
Modulus of elasticity	MPa	2960	ISO 527
Tensile strength	MPa	61,5	ISO 527
Tensile strain at tensile strength	%	5,3	ISO 527
Tensile stress at break	MPa	38	ISO 527
Tensile strain at break	%	10,5	ISO 527
Flexural modulus	MPa	3295	ISO 178
Flexural strain at break	%	NB	ISO 178
Flexural stress at 3.5% strain	MPa	88,8	ISO 178
Notched impact strength (Charpy), RT	kJ/m ²	2,8	ISO 179-1/1 eA
Impact strength (Charpy), RT	kJ/m ²	30,8	ISO 179-1/1 eU
Melting temperature	°C	>155	ISO 3146-C

FILAMENT SPECIFICATION

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

Netto filament weight 750 grams

GUIDELINE FOR PRINT SETTINGS

Advised 3D printing temperature	195 – 220 °C
Advised bed temperature	50 – 60 °C
Bed surface / modification	Our PLA/PHA compounds perform well on both heated and non-heated build platforms. For those users printing on a cold build platform we advise applying masking tape to the build area. The rough surface of the tape will provide enough adhesion for the first layer to stick and print almost without any warping.
Active cooling fan	0 – 100 %
Advised 3D printing speed	40 – 100 mm/sec

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.