

Technical datasheet

PLA Chameleon

color**Fabb**

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Get ready to add some dual color flair to your 3D printing projects with colorFabb's Chameleon filaments! Chameleon filaments alternate between two colors, depending on the angle at which you look at your print. Every time you print with Chameleon Nebula filament, your creations will have a mesmerizing, unique feel. The filament is PLA based and easy to print with and produces a smooth finish. Perfect for creating unique figurines, ornaments and even jewelry with a cosmic touch. Try it now and be amazed by the results!

TYPICAL MATERIAL PROPERTIES – 3D Printed

Physical properties	Unit	Value	Method
Tensile modulus	MPa	3285,79	ISO 527
Yield strength	MPa	70,91	ISO 527
Yield strain	%	2,52	ISO 527
Tensile strength	MPa	70,72	ISO 527
Tensile strain at tensile strength	%	2,53	ISO 527
Tensile stress at break	MPa	65,36	ISO 527
Tensile strain at break	%	3,49	ISO 527
Flexural modulus	MPa	2381,63	ISO 178
Flexural strain at standard deflection	MPa	80,13	ISO 178
Flexural strength	MPa	96,65	ISO 178
Flexural strain at flexural strength	%	5,23	ISO 178
Flexural stress at break	MPa	N/A	ISO 178
Flexural strain at break	%	N/A	ISO 178
Charpy unnotched impact strength	kJ/m2	23,25	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m2	3,97	ISO 179-1/1 eU
Heat Deflection Temperature (HDT)	°C	59,03	ISO 75

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TYPICAL MATERIAL PROPERTIES – Injection molded

Physical properties	Unit	Value	Method
Density	g/cm3	1,2 – 1,3	ISO 1183
Glass transition temperature	°C	55 – 60	DSC
Tensile modulus	MPa	3400	ISO 527
Tensile strength	MPa	45	ISO 527
Tensile strain at break	%	6	ISO 527
Flexural modulus	MPa	-	ISO 178
Charpy unnotched impact strength	kJ/m2	-	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m2	7	ISO 179-1/1 eU

FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0.05mm	≥ 95%
2,85 mm	± 0.05mm	≥ 95%

Netto filament weight 750g

GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	195 – 220 °C
Bed temperature	50 – 60 °C
Bed surface / modification	Tape or glue
Active cooling fan	100 %
Print speed	40 – 80 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, 210 °C nozzle temperature and 55 °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.