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Version: v1.0

PLA/PHA is tougher and less brittle than generic PLA grades thanks to the addition of PHA. PHA (polyhydroxyalkanoate) is a bio-polyester, there for our blend is 100% biodegradable. Besides its naturel color, the material is also available in a huge variety of colors, take a look in our PLA/PHA portfolio.

### TYPICAL MATERIAL PROPERTIES – 3D Printed

Physical properties	Unit	Value	Method
Tensile modulus	MPa	3069,72	ISO 527
Yield strength	MPa	64,27	ISO 527
Yield strain	%	2,49	ISO 527
Tensile strength	MPa	64,37	ISO 527
Tensile strain at tensile strength	%	2,49	ISO 527
Tensile stress at break	MPa	57,88	ISO 527
Tensile strain at break	%	4,06	ISO 527
Flexural modulus	MPa	2459,13	ISO 178
Flexural strain at standard deflection	MPa	95,08	ISO 178
Flexural strength	MPa	98,11	ISO 178
Flexural strain at flexural strength	%	5,07	ISO 178
Charpy unnotched impact strength	kJ/m2	26,40	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m2	3,66	ISO 179-1/1 eU

# Technical datasheet

## PLA/PHA

color**Fabb**

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### TYPICAL MATERIAL PROPERTIES – Injection molded

Physical properties	Unit	Value	Method
Density	g/cm <sup>3</sup>	1,24	ISO 1183
Melting temperature	°C	>155	ISO 3146-C
Tensile modulus	MPa	2960	ISO 527
Tensile strength	MPa	61,5	ISO 527
Tensile strain at break	%	10,5	ISO 527
Flexural modulus	MPa	3295	ISO 178
Charpy unnotched impact strength	kJ/m <sup>2</sup>	30,8	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m <sup>2</sup>	2,8	ISO 179-1/1 eU

### FILAMENT SPECIFICATION

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

**Netto filament weight** 750g

### GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	195 – 220 °C
Bed temperature	50 – 60 °C
Bed surface / modification	Our PLA/PHA performs 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 %
Print speed	40 – 100 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.