EON PLA

EON PLA is a plastic known for its biodegradability, as well as low thermal expansion. It is used for the fabrication of concept models, prototypes, toys, etc.

Mechanical Properties	Horizontal	Vertical xz	Method
Tensile Yield Strength	50 ± 3 MPa	59 ± 2 MPa	
Tensile Modulus	2,3 ± 0,1 GPa	2,4 ± 0,1 GPa	ISO 527-1
Elongation at Yield Point	2,9 ± 0,3 %	3,2 ± 1,0 %	150 527-1
Flexural Strength	83 ± 6 MPa	99 ± 1 MPa	
Flexural Modulus	3,1 ± 0,1 GPa	3,2 ± 0,1 GPa	ISO 178
Deflection at Flexural Strength	7,4 ± 0,2 mm	8,3 ± 0,2 mm	150 1/6
Impact Strength Charpy (1)	13 ± 1 kJ/m²	14 ± 1 kJ/m²	160 170 1
Impact Strength Charpy Notched	- (kJ/m2)	- (kJ/m2)	ISO 179-1

Thermal Properties	Typical Value	Method
Heat Deflection Temperature (0,45 MPa)	55° C	ISO 75
Heat Deflection Temperature (1,80 MPa)	55° C	

Other Properties	Typical Value	Method
Moisture Absorption in 7 days (1)	0,19 %	ISO 62
Density	1,24 g/cm ³	ISO 1183
Hardness	81	ISO 868

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Print Settings:

Print Settings 0,20 mm FAST (layers 0,20 mm);

Solid Layers Top: 0, Bottom: 0;

Perimeters: 2;

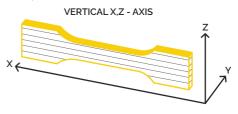
Infill 100% rectilinear:

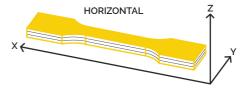
Infill Print Speed 200 mm/s;

Nozzle Temperature 215 °C all layers;

Bed Temperature 60 °C all layers;

Other parameters are set as default.





Notes:

1) Charpy Unnotched – Edgewise direction of blow according to ISO 179-1 2) 24° C; Humidity 22 %

Disclaimer:

The results presented in this data sheet are just for your information and comparison. Values are significantly dependent on print settings,

operator experiences, and surrounding conditions. Everyone has to consider suitability and possible consequences of printed parts usage.