

EON ABS/ASA

Given its mechanical properties, EON ABS/ASA is ideal for the production for functional prototyping, manufacturing tools, but also for the production of goods for everyday usage including outdoor applications. Its main advantages are its excellent weather resistance, good dimensional stability and low level of yellowing. This material can be used in the production of electrical and electronic equipment. It does not contain the restricted substances. The use of this material in the food or medical industry is not recommended.

Mechanical Properties	Horizontal	Vertical xz	Method
Tensile Yield Strength	42 ± 1 MPa	45 ± 2 MPa	ISO 527-1
Tensile Modulus	1,6 ± 0,1 GPa	1,7 ± 0,1 GPa	
Elongation at Yield Point	3,4 ± 0,2 %	3,8 ± 0,2 %	
Flexural Strength	64 ± 1 MPa	69 ± 1 MPa	ISO 178
Flexural Modulus	2,0 ± 0,1 GPa	1,9 ± 0,1 GPa	
Deflection at Flexural Strength	9,0 ± 0,1 mm	9,0 ± 1,0 mm	
Impact Strength Charpy (I)	25 ± 3 kJ/m ²	38 ± 11 kJ/m ²	ISO 179-1
Impact Strength Charpy Notched	12 ± 1 kJ/m ²	15 ± 3 kJ/m ²	

Thermal Properties	Typical Value	Method
Heat Deflection Temperature (0,45 MPa)	93° C	ISO 75
Heat Deflection Temperature (1,80 MPa)	86° C	

Other Properties	Typical Value	Method
Moisture Absorption in 7 days (2)	0,17 %	ISO 62
Density	1,07 g/cm ³	ISO 1183
Hardness	78	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;

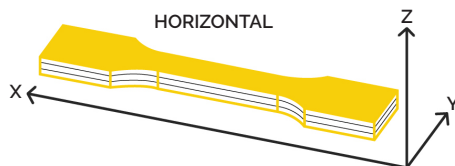
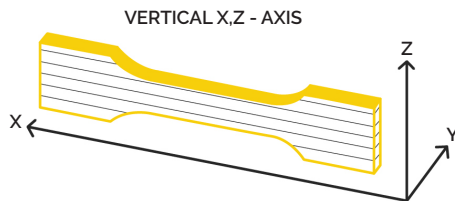
Infill 100 % rectilinear;

Infill Print Speed 200 mm/s;

Nozzle Temperature 265 °C all layers;

Bed Temperature 110 °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.