EON PA11

EON PA11 Powder is a bio-based, high-performance nylon material engineered for strong, flexible parts. It's an excellent choice for producing functional prototypes and low-volume productions, especially when parts need to withstand bending or absorb impact.

Mechanical Properties (1)	Typical Value (2)	Method
Ultimate Tensile Strength	49 MPa	ASTM D638-14 Type 1
Tensile Modulus	1,6 GPa	
Elongation at Break (X/Y)	40 %	
Flexural Strength	55 MPa	ASTM D790-15
Flexural Modulus	1,4 GPa	
Notched Izod	71 J/m	ASTM D256-10

Thermal Properties (1)	Typical Value (2)	Method
Heat Deflection Temp. (1.8 MPa)	46° C	ASTM D648-16
Heat Deflection Temp. (0.45 MPa)	182° C	
Vicat Softening Temperature	189° C	ASTM D1525

Other Properties (1)	Typical Value (2)	Method
Water Absorption (printed part)	0,07 %	ASTM D570

Samples printed with EON PA11 have been evaluated in accordance with ISO 10993-1, and has passed the requirements for the following biocompatibility risks:

ISO Standard	Result
ISO 10993-5:2009	Non-Cytotoxic
ISO 10993-10:2010/(R)2014	Non-Irritant
ISO 10993-10:2010/(R)2014	Non-Sensitizer

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Flammability Properties	
Testing Standard	**Rating**
UL 94 Section 7	HB *

* Thickness of the sample tested = 3,00mm

Notes:

1) Material properties may vary with part geometry, print orientation and temperature.

2) Parts were printed using a SLS printer with EON PA11 Powder. Parts were conditioned at 50% relative humidity and 23 °C for 7 days before testing.