

EON PA12-GF

EON PA12-GF powder is a polyamide with a glass-filled polymer. Parts made from this material show significantly increased durability, stiffness, as well as thermal and chemical resistance compared to EON PA12.

Mechanical Properties (1)	Typical Value (2)	Method
Ultimate Tensile Strength	38 MPa	ASTM D638-14 Type 1
Tensile Modulus	2800 MPa	
Elongation at Break (X/Y)	4 %	
Elongation at Break (Z)	3 %	
Flexural Strength	56 MPa	ASTM D790-15
Flexural Modulus	2400 MPa	
Notched Izod	36 J/m	ASTM D256-10

Thermal Properties (1)	Typical Value (2)	Method
Heat Deflection Temp. (1.8 MPa)	113° C	ASTM D648-16
Heat Deflection Temp. (0.45 MPa)	170° C	
Vicat Softening Temperature	175° C	ASTM D1525

Other Properties (1)	Typical Value (2)	Method
Water Absorption (printed part)	0.24 %	ASTM D570

Samples printed with EON PA12-GF have been evaluated in accordance with ISO 10993-1:2018, 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 PA12-GF powder. Parts were conditioned at 50% relative humidity and 23 °C for 7 days before testing.