

Technical datasheet

nGen_FLEX

color**Fabb**

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nGen_FLEX is made with Amphora FL6000, a flexible material uniquely engineered for extrusion-based additive manufacturing processes. Thanks to exceptional layer-to-layer adhesion and melt strength, it prints at a faster speed than other elastomeric materials, saving you time. The nGen_FLEX is an engineering-grade material that demonstrates superior durability and toughness, enabling designers to quickly create truly functional parts that can withstand the rigors of everyday use. With a Shore A hardness level of 95, outstanding chemical resistance, and a temperature resistance that allows steam sterilization, users may find it to be the ideal polymer for additive manufacturing of prosthetics, orthotics, automotive parts, apparel, tooling, or a variety of consumer products.

TYPICAL MATERIAL PROPERTIES

Physical properties	Unit	Value	Method
Density	g/cm ³	1,13	D 792
Tensile Stress @ Yield	MPa	14	D 638
Tensile Stress @ Break	MPa	22	D 638
Elongation @ Yield	%	38	D 638
Elongation @ Break	%	400	D 638
Flexural Modulus	MPa	150	D 790
Tear Strength	N	350	D 1004

FILAMENT SPECIFICATION

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

Netto filament weight 750 grams / 2200 grams

GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	240 - 260°C
Bed temperature	80 °C (+ buildTak)
Bed surface/modification	nGen_FLEX gives best results on a buildTak covered buildplate, heated at around 80C. Make sure the distance between nozzle and buildplate is not too close, first layer should not be squeezed too much.
Active cooling Fan	0 – 50%
Advised 3D printing speed	40 – 60 mm/s

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.