

Technical datasheet

nGen

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nGen is made with Amphora AM3300 and has good flow properties through the printer nozzle - even at lower temperatures than some other polymers require. These properties make nGen more workable at a wider breadth of temperatures, producing reliable results and resulting in less waste. nGen exhibits advanced overhang ability, excellent looks, and large printing temperature range—empowering large panel of users to create durable and useful items.

TYPICAL MATERIAL PROPERTIES

Physical properties	Unit	Value	Method
Density	g/cm ³	1,20	D 792
Tensile Stress @ Yield	MPa	50	D 638
Tensile Stress @ Break	MPa	35	D 638
Elongation @ Yield	%	4,5	D 638
Elongation @ Break	%	193	D 638
Flexural Modulus	MPa	1800	D 790
Flexural Strength	MPa	67	D 790
Rockwell Hardness, R Scale	-	105	D 785
Izod Impact strength, notched @ 23 °C	J/m	70	D 256
Izod Impact strength, notched @ -40 °C	J/m	38	D 256
Izod Impact strength, unnotched @ 23 °C	J/m	NB	D 4812
Izod Impact strength, unnotched @ -40 °C	J/m	NB	D 4812
Deflection Temperature @ 0.455 MPa	°C	71	D 648
Deflection Temperature @ 1.82 MPa	°C	63	D 648

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

Advised 3D printing temperature	220 – 240 °C
Advised bed temperature	75 – 85 °C
Bed surface / modification	nGen gives best results on a heated build platform, 75C to about 85C is usually needed for proper adhesion to a glass plate. Printing on a cold bed is possible but you'll need some adhesion tools to minimize warping. 3DLac, buildTak or 3DEeze can do the trick.
Active cooling fan	0 – 100 %
Advised 3D printing speed	40 – 70 mm/sec

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.