Technical datasheet

PA NEAT

colorFabb

Date of issue: October 27 , 2022
Version: v1.0

PA Neat is our engineering grade polyamide (nylon). PA NEAT allows continues use at 120°C while retaining sufficient mechanical properties and thus highly temperature resistant and tough. This makes it a perfect material for the professional user to make durable prints that need to perform.

PA Neat is a specific formulation and results in extremely low warp tendencies during printing.

TYPICAL MATERIAL PROPERTIES – 3D Printed			
Physical properties	**Unit**	**Value**	**Method**
Tensile modulus	MPa	2982,58	ISO 527
Yield strength	MPa	62,96	ISO 527
Yield strain	%	3,30	ISO 527
Tensile strength	MPa	62,96	ISO 527
Tensile strain at tensile strength	%	3,30	ISO 527
Tensile stress at break	MPa	39,74	ISO 527
Tensile strain at break	%	8,50	ISO 527
Charpy unnotched impact strength	kJ/m2	32,36	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m2	5,20	ISO 179-1/1 eU

colorFabb B.V.
Bremweg 7
5951 DK Belfeld
The Netherlands

T +31 (0)77 – 4664015
F +31 (0)77 – 3971414
E sales@colorfabb.com
I colorfabb.com

KvK nr: 53498607
VAT nr: NL850902770B01
IBAN: NL54RABO0151849188
BIC: RABONL2U

Technical datasheet

PA NEAT

colorFabb

Date of issue: October 27 , 2022
Version: v1.0

TYPICAL MATERIAL PROPERTIES – Injection molded

Physical properties	Unit	Value	Method
Density	g/cm3	1,14	ISO 1183
Water absorption	%	<0,3	ISO 62
Tensile Strength	MPa	78	ISO 527
Tensile Elongation@break	%	4,4	ISO 527
Charpy Impact strength, unnotched	kJ/m^2	90	ISO 179 1eU
Continuous Service Temp.	°C	120	IEC 60216

FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0,05	≥ 95%
2,85 mm	± 0,10	≥ 95%

Netto filament weight 750g

GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	265 - 290ºC
Bed temperature	0 - 50ºC
Bed surface / modification	-
Active cooling fan	0-50%
Print speed	30-40 mm/s

Notes

The reported properties are an average of a batch of 3D printed specimens. The specimens have been printed in XY plane, using 0.15mm layerheight, 100% infill, 0.4mm nozzle, 280 °C nozzle temperature and 50 °C bed temperature.

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.

colorFabb B.V.
Bremweg 7
5951 DK Belfeld
The Netherlands

T +31 (0)77 – 4664015
F +31 (0)77 – 3971414
E sales@colorfabb.com
I colorfabb.com

KvK nr: 53498607
VAT nr: NL850902770B01
IBAN: NL54RABO0151849188
BIC: RABONL2U