

Product Information

INFINAM® PA 6002 P

POLYAMIDE-12 POWDER FOR ADDITIVE FABRICATION PROCESSES

INFINAM® PA 6002 P is a fine powder especially for the use in additive fabrication. It is characterized by a high toughness and softness. Our product is suitable for manufacturing of functional prototypes, manufacturing of individual units as well as serial parts. INFINAM® PA 6002 P is especially suitable for powder bed fusion technologies.

Features

- Exploitable on common systems for powder-based additive fabrication
- Easy-to-process
- High process stability
- Excellent powder flow properties
- Excellent mechanical properties
- Excellent recyclability
- Excellent surface resolution and feature detail
- Nice surface finish
- Good resistance against numerous chemicals

The features and properties presented are to be understood as typical and are intended for reference and comparison purposes only. Due to layer-wise construction and by variation of processing conditions the actual properties of components from additive processes will vary. Due to process-related deviations the user is responsible to ensure the characteristic values required for the respective use and to carry out additional application-related tests if necessary.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.INFINAM.COM

Properties of 3D printed parts acc. ISO	dry / cond	Unit	Test Standard
Tensile modulus flat X	1700 / -	MPa	ISO 527
Tensile modulus on-edge Y	1700 / -	MPa	ISO 527
Tensile modulus upright Z	1700 / -	MPa	ISO 527
Tensile strength flat X	50 / -	MPa	ISO 527
Tensile strength on-edge Y	50 / -	MPa	ISO 527
Tensile strength upright Z	50 / -	MPa	ISO 527
Nominal strain at break flat X, εB	16 / -	%	ISO 527
Nominal strain at break on-edge Y, εB	8 / -	%	ISO 527

Nominal strain at break upright Z, εB	8 / -	%	ISO 527
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Thermal properties	dry / cond	Unit	Test Standard
Melting temp., DSC 1st heating, powder	187 / *	°C	ISO 11357

Polymer analytics	dry / cond	Unit	Test Standard
Rel. solution viscosity	1.65 / *	-	ISO 307

Powder properties	Value	Unit	Test Standard
Bulk density, powder	470	g/l	EN ISO 60
Powder flow	25	s	ISO 6186
Particle size, D(50)	58	µm	ISO 13320, DIN ISO 8130-13

LCA-values	Value	Unit	Test Standard
LCA name of certificate	INFINAM® low	-	ISO 14040, 14044
LCA certifier	TÜV Rheinland	-	ISO 14040, 14044
Blue water consumption	18.7	kg	ISO 14040, 14044
Global Warming Potential incl. bio. C incl. LUC	5.0	kg CO2 eq.	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	4.9	kg CO2 eq.	ISO 14040, 14044
Land use (ReCiPe 2016)	0.3	Annual crop eq. y	ISO 14040, 14044
GWP savings incl. bio. C. as compared to classical production	4.3	kg CO2 eq.	ISO 14040, 14044

Characteristics

Key Features, Industrial Sector

Sustainable, Industry and Engineering, 3D Printing

Key Features, LCA

RFP (reduced foot print)

Key Features, Processing

3D Printing

Key Features, Delivery form

Powder

Key Features, Conformity

Food contact

Processing

Additive manufacturing, Powder bed fusion

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