Product Information

INFINAM® PA 6014 P

POLYAMIDE-12 POWDER FOR ADDITIVE MANUFACTURING PROCESSES

INFINAM® PA 6014 P is a fine powder especially for the use in additive manufacturing. It is characterized by a high toughness and black color. Our product is suitable for manufacturing of functional prototypes, manufacturing of individual units as well as serial parts. INFINAM® PA 6014 P is especially suitable for powder bed fusion technologies.

Features

- Nice surface finish in black color
- Homogeneously and solid-colored components
- Exploitable on common systems for powder-based additive manufacturing
- Easy-to-process
- High process stability
- Excellent powder flow properties
- Excellent mechanical properties
- Excellent surface resolution and feature detail
- Good resistance against numerous chemicals
- Improved UV resistance

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.

The results shown have been generated from a low number of production lots. Therefore, they are preliminary and not yet the result of a statistical evaluation.

The values presented are typical or average values, they do not constitute a specification.

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	**1900 / -**	MPa	ISO 527
Tensile modulus on-edge Y	**1900 / -**	MPa	ISO 527
Tensile modulus upright Z	**1850 / -**	MPa	ISO 527
Tensile strength flat X	**52 / -**	MPa	ISO 527
Tensile strength on-edge Y	**52 / -**	MPa	ISO 527

Tensile strength upright Z	**48 / -**	MPa	ISO 527
Nominal strain at break flat X, tB	**14 / -**	%	ISO 527
Nominal strain at break on-edge Y, tB	**14 / -**	%	ISO 527
Nominal strain at break upright Z, tB	**8 / -**	%	ISO 527

Thermal properties	dry / cond	Unit	Test Standard
Melting temp., DSC 1st heating, powder	**188 / ***	°C	ISO 11357

Polymer analytics	dry / cond	Unit	Test Standard
Rel. solution viscosity	**1.60 / ***	-	ISO 307

Powder properties	Value	Unit	Test Standard
Bulk density, powder	**420**	g/l	EN ISO 60
Powder flow	**27**	s	ISO 6186
Particle size, D(50)	**60**	µm	ISO 13320, DIN ISO 8130-13

Characteristics

Key Features, Industrial Sector
Sustainable, Industry and Engineering, 3D Printing

Key Features, Sustainability
RFP (reducted foot print)

Key Features, Processing
3D Printing

Key Features, Delivery form
Powder

Key Features, Additives
Unfilled

Processing
Additive manufacturing, Powder bed fusion

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