

Restricted

Product Information

INFINAM® PA 6005 P

POLYAMIDE-6X POWDER FOR ADDITIVE FABRICATION PROCESSES

INFINAM® PA 6005 P is a natural colored fine powder especially for the use in additive fabrication. Our product is suitable for manufacturing of functional prototypes, manufacturing of individual units as well as serial parts. INFINAM® PA 6005 P is especially suitable for powder bed fusion technologies.

Features

- High temperature resistance
- Exploitable on common systems for powder-based additive fabrication
- Easy-to-process
- High process stability
- Low water uptake
- Excellent mechanical properties
- 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.

Powder properties	dry / cond	Unit	Test Standard
Bulk density, powder	450	g/l	EN ISO 60
Density	1050 / -	kg/m ³	ISO 1183
Particle size, D(50)	60	µm	ISO 13320, DIN ISO 8130-13
Melting temp., DSC 1st heating, powder	215 / *	°C	ISO 11357

Properties of 3D printed parts acc. ISO	dry / cond	Unit	Test Standard
Tensile modulus flat X	2000 / -	MPa	ISO 527
Tensile modulus on-edge Y	2000 / -	MPa	ISO 527

Restricted

Tensile modulus upright Z	2000 / -	MPa	ISO 527
Tensile strength flat X	57 / -	MPa	ISO 527
Tensile strength on-edge Y	57 / -	MPa	ISO 527
Tensile strength upright Z	55 / -	MPa	ISO 527
Nominal strain at break flat X, εtB	34 / -	%	ISO 527
Nominal strain at break on-edge Y, εtB	34 / -	%	ISO 527
Nominal strain at break upright Z, εtB	29 / -	%	ISO 527

Characteristics

Key Features, Industrial Sector

Industry and Engineering, 3D Printing

Key Features, Processing

3D Printing

Key Features, Delivery form

Powder

Key Features, Electrical

Insulating

Key Features, Additives

Unfilled

Processing

Laser sintering, Additive manufacturing, Powder bed fusion

Special Characteristics

Semi-crystalline

Color

Natural color

Delivery form

Fine powder (FP)

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