

Product Information

# INFINAM® PA 6006 P

## POLYAMIDE-12 POWDER FOR ADDITIVE FABRICATION PROCESSES

**INFINAM® PA 6006 P** is a fine powder with incorporated glass beads especially for the use in additive fabrication. It is characterized by a high stiffness. Our product is suitable for manufacturing of functional prototypes, manufacturing of individual units as well as serial parts. INFINAM® PA 6006 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 surface resolution and feature detail
- Smooth surface finish
- Good resistance against numerous chemicals
- No separation of polymer and glass beads

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

FOR FURTHER INFORMATION PLEASE CONTACT US AT [EVONIK-HP@EVONIK.COM](mailto:EVONIK-HP@EVONIK.COM)  
OR VISIT OUR PRODUCT AT [WWW.INFINAM.COM](http://WWW.INFINAM.COM)

Properties of 3D printed parts acc. ISO	dry / cond	Unit	Test Standard
Tensile modulus flat X	2850 / -	MPa	ISO 527
Tensile modulus on-edge Y	2850 / -	MPa	ISO 527
Tensile modulus upright Z	2850 / -	MPa	ISO 527
Tensile strength flat X	40 / -	MPa	ISO 527
Tensile strength on-edge Y	40 / -	MPa	ISO 527
Tensile strength upright Z	40 / -	MPa	ISO 527
Strain at break flat X, B	4 / -	%	ISO 527

Strain at break on-edge Y, B	4 / -	%	ISO 527
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Strain at break upright Z, B	3 / -	%	ISO 527
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#### Thermal properties

dry / cond

Unit

Test Standard

Melting temp., DSC 1st heating, powder

188 / \*

°C

ISO 11357

#### Powder properties

Value

Unit

Test Standard

Bulk density, powder

480

g/l

EN ISO 60

Particle size, D(50)

55

µm

ISO 13320, DIN ISO 8130-13

#### Sustainability

Value

Unit

Test Standard

LCA name of certificate

[INFINAM® PA 6006-P](#)

ISO 14040, 14044

LCA certifier

[TÜV Rheinland](#)

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ISO 14040, 14044

Blue water consumption

15.6

kg

ISO 14040, 14044

Global Warming Potential incl. bio. C incl. LUC

4.1

kg CO<sub>2</sub> eq./kg

ISO 14040, 14044

Global Warming Potential excl. bio. C incl. LUC

4.1

kg CO<sub>2</sub> eq./kg

ISO 14040, 14044

Land use (ReCiPe 2016)

0.1

Annual crop eq. y

ISO 14040, 14044

GWP savings as compared to 2023 reference

-2.9

kg CO<sub>2</sub> eq./kg

ISO 14040, 14044

#### Characteristics

##### Key Features, Industrial Sector

Sustainable, 3D Printing

##### Key Features, Sustainability

RFP (reduced foot print)

##### Key Features, Processing

3D Printing

##### Key Features, Delivery form

Powder

##### Key Features, Additives

Glass beads / spheres

##### Processing

Laser sintering, Additive manufacturing, Powder bed fusion

##### Delivery form

Fine powder (FP)

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