

# Preliminary

## 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 any type of system of 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 chemical resistance

The information presented resembles typical values 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	<b>470</b>	g/l	EN ISO 60
Density	<b>1020 / -</b>	kg/m <sup>3</sup>	ISO 1183
Powder flow	<b>25 / *</b>	s	ISO 6186
Particle size, D(50)	<b>58 / *</b>	µm	ISO 13320, DIN ISO 8130-13
Viscosity number	<b>1,65 / *</b>	cm <sup>3</sup> /g	ISO 307
Melting temp., DSC 1st heating, powder	<b>187 / *</b>	°C	ISO 11357

Properties of 3D printed parts acc. ISO	dry / cond	Unit	Test Standard
Tensile modulus flat X	<b>1700 / -</b>	MPa	ISO 527

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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

## 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

### Special Characteristics

Semi-crystalline

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