

## 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](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

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	<b>48 / -</b>	MPa	ISO 527
Nominal strain at break flat X, tB	<b>14 / -</b>	%	ISO 527
Nominal strain at break on-edge Y, tB	<b>14 / -</b>	%	ISO 527
Nominal strain at break upright Z, tB	<b>8 / -</b>	%	ISO 527

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

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

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

## Characteristics

### Key Features, Industrial Sector

Sustainable, Industry and Engineering, 3D Printing

### Key Features, Sustainability

RFP (reduced foot print)

### Key Features, Processing

3D Printing

### Key Features, Delivery form

Powder

### Key Features, Additives

Unfilled

### Processing

Additive manufacturing, Powder bed fusion

This information and all technical and other advice are based on Evonik's present knowledge and experience. However, Evonik assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights. Evonik reserves the right to make any changes to information or advice at any time, without prior or subsequent notice. Evonik disclaims all representations and warranties, whether express or implied, and shall have no liability for, merchantability of the product or its fitness for a particular purpose (even if Evonik is aware of such purpose), or otherwise. EVONIK SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. It is the customer's sole responsibility to arrange for inspection and testing of all products by qualified experts. Reference to trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

\* is a registered trademark of Evonik Industries AG or one of its subsidiaries

**Evonik Operations GmbH**  
**Smart Materials**  
**High Performance Polymers**  
45772 Marl / Germany  
Tel: +49 2365 49-9878  
[evonik-hp@evonik.com](mailto:evonik-hp@evonik.com)  
[www.plastics-database.com](http://www.plastics-database.com)