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**Product Information** 

# **INFINAM® PA 6004 P**

# POLYAMIDE-12 POWDER FOR ADDITIVE FABRICATION PROCESSES

**INFINAM® PA 6004 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 6004 P is especially suitable for powder bed fusion technologies.

#### **Features**

- Powder for flame retardant 3D print parts
- 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
- 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.

FOR FURTHER INFORMATION PLEASE CONTACT US AT <a href="mailto:evonik-hp@evonik.com">evonik-hp@evonik.com</a>
OR VISIT OUR PRODUCT AT <a href="https://www.3D-printing.com">www.3D-printing.com</a>

Powder properties	dry / cond	Unit	Test Standard
Bulk density, powder	520	g/l	EN ISO 60
Particle size, D(50)	55	μm	ISO 13320, DIN ISC 8130-13
Rel. solution viscosity	1,60 / *	-	ISO 307
Melting temp., DSC 1st heating, powder	185 / *	°C	ISO 11357
Properties of 3D printed parts acc. ISO	dry / cond	Unit	Test Standard
Tensile modulus flat X	2500 / -	MPa	ISO 527



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Tensile modulus on-edge Y	2500 / -	MPa	ISO 527
Tensile modulus upright Z	2300 / -	MPa	ISO 527
Tensile strength flat X	47 / -	MPa	ISO 527
Tensile strength on-edge Y	47 / -	MPa	ISO 527
Tensile strength upright Z	42 / -	MPa	ISO 527
Nominal strain at break flat Χ, εtB	4 / -	%	ISO 527
Nominal strain at break on-edge Y, εtB	4 / -	%	ISO 527
Nominal strain at break upright Z, εtB	4 / -	%	ISO 527
Burnin behav. at thickness h	V-0 / *	class	IEC 60695-11-1
Thickness tested	3,0 / *	mm	-

#### Characteristics

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

**Key Features, Processing** 

3D Printing

**Key Features, Delivery form** 

Powder

**Key Features, Additives** 

Flame retardant

Processing

Additive manufacturing, Powder bed fusion

**Special Characteristics** 

Halogen-free, Semi-crystalline

Color

White

**Additives** 

Flame retardant

**Delivery form** 

Fine powder (FP)



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