

Product Information

INFINAM TPA 4006 P

POLYAMIDE-12 POWDER FOR ADDITIVE FABRICATION PROCESSES



INFINAM® TPA 4006 P is a PA12 elastomer consisting of PA12 segments and softening segments and it is characterized by elastomeric properties and outstanding impact strength. Our product is suitable for the manufacturing of functional prototypes, manufacturing of individual units as well as serial parts. INFINAM® TPA 4006 P is especially suitable for powder bed fusion technologies.

Features

- Exploitable on common systems for powder-based additive fabrication
- Easy-to-process and high process stability
- Excellent powder flow properties
- Elastomeric properties (rubber-like)
- Outstanding (cold) impact strength
- Excellent surface resolution and feature detail
- 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 EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.3D-PRINTING.COM

Powder properties

	Value	Unit	Test Standard
Bulk density, powder	440	g/l	EN ISO 60
Density	980	kg/m ³	ISO 1183
Powder flow	20	s	ISO 6186
Particle size, D(50)	70	µm	ISO 13320, DIN ISO 8130-13
Melting temp., DSC 1st heating, powder	154	°C	ISO 11357

Properties of 3D printed parts acc. ISO

	Value	Unit	Test Standard
Tensile modulus flat X	80	MPa	ISO 527

Tensile modulus on-edge Y	80	MPa	ISO 527
Tensile modulus upright Z	70	MPa	ISO 527
Tensile strength flat X	14	MPa	ISO 527
Tensile strength on-edge Y	14	MPa	ISO 527
Tensile strength upright Z	7	MPa	ISO 527
Strain at break flat X, εB	350	%	ISO 527
Strain at break on-edge Y, εB	350	%	ISO 527
Strain at break upright Z, εB	>50	%	ISO 527

Characteristics

Key Features, Industrial Sector

3D Printing

Key Features, Processing

3D Printing

Key Features, Delivery form

Powder

Processing

Laser sintering, Additive manufacturing, Powder bed fusion

Special Characteristics

High impact strength

Features

Flexible

Color

Natural color

Additives

Antioxidant agent

Delivery form

Fine powder (FP)

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