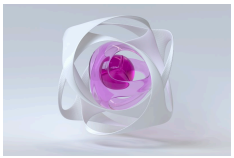
Product Information

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.

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
OR VISIT OUR PRODUCT AT WWW.INFINAM.COM

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
Typical for the mat.nom.strain at br.flat X, tB	**>350**	%	ISO 527
Typical for the mat.nom.strain at br.on-edge Y, tB	**>350**	%	ISO 527

Typical for the mat.nom.strain at br.upright Z, tB	**>50**	%	ISO 527

Thermal properties	Value	Unit	Test Standard
Melting temp., DSC 1st heating, powder	**154**	°C	ISO 11357

Powder properties	Value	Unit	Test Standard
Bulk density, powder	**440**	g/l	EN ISO 60
Powder flow	**20**	s	ISO 6186
Particle size, D(50)	**70**	µm	ISO 13320, DIN ISO 8130-13

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

Features
Flexible

Delivery form
Fine powder (FP)

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