

MATERIAL PAGF

Datasheet for glass filled polyamide parts produced by Selective Laser Sintering



Material PAGF is a glass-filled whitish polyamide 12 powder, which is characterized by an excellent stiffness in combination with good elongation at break. Laser sintered parts made from PAGF possess excellent material properties:

- High stiffness and mechanical wear-resistance
- Good thermal loading and long term constant behaviour
- High dimensional accuracy and detail resolution

Parts made of material PAGF have excellent mechanical properties, very smooth surfaces and high accuracy. Typical applications of the material are housings and thermally stressed parts, final parts within the engine area of cars, deep-drawing dies or any other part requiring particular stiffness, high heat distortion temperature and low abrasive wear.

Material PAGF is processed on our ISO9001 environment and can be coloured, polished and coated.

Part properties	Value	Unit
Part colour	Whitish	-
Part density	1.22	g/cm ³
Minimum wall thickness	1.5	mm
Layer thickness	0.1 – 0.12	mm
Max. product size	335 x 335 x 603	mm
Tensile modulus XY	3200	MPa
Tensile modulus Z	2500	MPa
Tensile strength XY	48	MPa
Tensile strength Z	42	MPa
Strain at break XY	9	%
Strain at break Z	5.5	%
Shore hardness	80	Shore D
Melting temperature	185 - 188	°C

Please note that all mentioned mechanical properties are optimum values according to manufacturer. Due to the layer by layer production process and the specific design of each individual product values may differ. *If specific properties and/or dimensions are critical, always contact us so we can inform you how to obtain required specifications!*

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