



Nylon 12 AF

LASER SINTERING MATERIAL SPECIFICATIONS

Highlights

- Aluminum filled composite polyamide producing strong, stiff parts with a grey metallic appearance
- Improved tensile modulus and flex modulus
- Good wear resistance and detail reproduction
- Suitable for parts requiring superior surface finish

Applications

- Aerospace, automotive, packaging, electronics, consumer products, industrial, and OEM products
- Functional components
- Illustrative models with metallic appearance
- Jigs and fixtures

TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	Grey Metallic	Grey Metallic
Density	DIN 53466	0.049 lb/in ³	1.36 g/cm ³
Elongation at Break	ASTM D638	1.5 - 3.5%	1.5 - 3.5%
Flexural Strength	ASTM D790	7,832 psi	54 MPa
Flexural Modulus	ASTM D790	289,250 psi	1,994 MPa
Heat Deflection Temp @66 psi	ASTM D648	351°F	177°C
Heat Deflection Temp @264 psi	ASTM D648	279°F	137°C
Tensile Modulus	ASTM D638	373,800 psi	2,577 MPa
Tensile Strength	ASTM D638	4,628 psi	32 MPa
As Processed Surface Finish	Up-facing surfaces	300 - 400 RA	7.6 - 10.2 μm
Volume Resistivity (74°F, 35.4% RH)	—	—	2.5E+03 ohms-cm
Surface Resistant (74°F, 35.4% RH)	—	—	3.1E+10 ohms-cm

The information presented represents typical values intended for reference and comparison purposes only. It should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, color etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

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