



# Nylon 12 PA

## LASER SINTERING MATERIAL SPECIFICATIONS

### Highlights

- Excellent surface resolution/feature details
- Good chemical resistance
- Low moisture absorption
- Produce durable production parts without tooling

### Applications

- Housings and enclosures
- Impellers, connectors, and complex ductwork
- Snap-fit designs
- Low volumes of functional parts
- Complex prototype plastic parts

## TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	White	White
Density	DIN 53466	0.034 lb/in <sup>3</sup>	0.95 g/cm <sup>3</sup>
Elongation at Break	ASTM D638	4 - 15%	4 - 15%
Flexural Strength	ASTM D790	6,850 psi	47 MPa
Flexural Modulus	ASTM D790	188,549 psi	1,300 MPa
Heat Deflection Temp @66 psi	ASTM D648	350°F	177°C
Heat Deflection Temp @264 psi	ASTM D648	187°F	86°C
Izod Impact Strength (notched)	ASTM D256	0.8 ft-lb/in	43 J/m
Tensile Modulus	ASTM D638	246,500 psi	1,700 MPa
Tensile Strength	ASTM D638	6,815 psi	46 MPa
Surface Finish	Up-facing surfaces	350 microinches	9 µm RA
Volume Resistivity (22°C, 50%RH, 500V)	ASTM D257-93	—	3.1 x 10 <sup>14</sup> ohm x 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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