



# Nylon 11

## LASER SINTERING MATERIAL SPECIFICATIONS

### Highlights

- High-elongation and impact strength for toughness
- Qualified for low to mid volume production

### Applications

- Aerospace production parts. Best suited for ducting and other applications requiring high elongation and impact strength
- Motorsports, consumer and sporting goods
- Prototype living hinge designs

## TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH		METRIC	
		XY AXIS	ZX AXIS	XY AXIS	ZX AXIS
Color/Appearance	Visual	White		White	
Density	DIN 53466	0.0376 lb/in <sup>3</sup>		1.04 g/cm <sup>3</sup>	
Elongation at Break	ASTM D638	21%	18%	21%	18%
Flexural Strength	ASTM D790	6,400 psi	—	44 MPa	—
Flexural Modulus	ASTM D790	126 ksi	—	869 MPa	—
Heat Deflection Temp @66 psi	ASTM D648	315°F	—	157°C	—
Heat Deflection Temp @264 psi	ASTM D648	122°F	—	50°C	—
Tensile Modulus	ASTM D638	239 ksi	—	1,647 MPa	—
Tensile Strength	ASTM D638	6,817 psi	—	47 MPa	—
Izod Impact Strength (notched)	ASTM D256	1.30 ft-lb/in		70 J/m	
Izod Impact Strength (unnotched)	ASTM D256	26 ft-lb/in		1,370 J/m	
Surface Finish	Ra	500 RMS		280 μm	
Volume Resistivity (22°C, 50%RH, 500V)	ASTM D257-93	—		1.00E+15 ohm-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.

The performance characteristics of these materials may vary according to application, operating conditions, or end use. Each user is responsible for determining that the material is safe, lawful, and technically suitable for the intended application. Stratasys makes no warranties of any kind, express or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use, or warranty against patent infringement.

XZ = X or "on edge"

XY = Y or "flat"

ZX = or "upright"

