



# Nylon 12 FR

## LASER SINTERING MATERIAL SPECIFICATIONS

### Highlights

- Material passes FAR 25.853
- Material passes 60 second vertical burn test
- Best accuracy & surface finish of available fire retardant materials

### Applications

- Aerospace applications requiring excellent mechanical strength
- Underhood components
- Applications requiring fire retardant properties

## 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	0.0368 lb/in <sup>3</sup>		1.02 g/cm <sup>3</sup>	
Elongation at Break	ASTM D638	8%	4%	8%	4%
Flexural Modulus	ASTM D790	217 ksi	—	1,500 MPa	—
Heat Deflection Temp @66 psi	ASTM D648	351°F	—	177°C	—
Heat Deflection Temp @264 psi	ASTM D648	187°F	—	86°C	—
Tensile Modulus	ASTM D638	247 ksi	—	1,700 MPa	—
Tensile Strength	ASTM D638	6,962 psi	—	48 MPa	—
Izod Impact Strength (notched)	ASTM D256	0.8 ft-lb/in		43 J/m	

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"

