



# Nylon 12 GSL

## LASER SINTERING MATERIAL SPECIFICATIONS

### Highlights

- Lightweight Nylon 12 material with carbon fiber
- High strength-to-weight ratio
- Excellent surface finish and detail
- Suited for higher temperature uses

### Applications

- Aerospace
- Athletic equipment
- Unmanned Aerial Vehicles (UAV)

## TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH		METRIC	
		XY AXIS	ZX AXIS	XY AXIS	ZX AXIS
Color/Appearance	Visual	Dark Grey		Dark Grey	
Density	ASTM D1895	0.0303 lb/in <sup>3</sup>		0.84 g/cm <sup>3</sup>	
Elongation at Break	ASTM D638	2.63%	2.77%	2.63%	2.77%
Flexural Modulus	ASTM D790	731 ksi	625 ksi	5,040 MPa	4,313 MPa
Heat Deflection Temperature @ 66 psi	ASTM D648	356°F	352°F	180°C	178°C
Heat Deflection Temperature @ 264 psi	ASTM D648	338°F	303°F	170°C	151°C
Tensile Modulus	ASTM D638	554 ksi	282 ksi	3,816 MPa	1,945 MPa
Tensile Strength	ASTM D638	7,170 psi	4,835 psi	49 MPa	33 MPa
Volume Resistance	ASTM D257	7.6E+05 ohms-cm		—	
Surface Resistance	ASTM D257	4.0E+04 ohms		—	
Voltage Field	—	<50 volts		—	

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"

