



FR-106

LASER SINTERING MATERIAL SPECIFICATIONS

Highlights

- Polyamide composite with excellent fire retardancy
- Passes FAR 25.853 12 Second and 30 Second Burn tests
- Exceptional elongation at break
- Passes FAR 25.853 Smoke Density test

Applications

- Aerospace production parts
- Underhood components
- Well suited for demanding applications which require flame retardancy

TYPICAL PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH		METRIC	
		XY AXIS	ZX AXIS	XY AXIS	ZX AXIS
Color/Appearance	Visual	Translucent White		Translucent White	
Density	DIN 53466	0.0376 lb/in ³		1.04 g/cm ³	
Elongation at Break	ASTM D638	38%	21%	38%	21%
Flexural Strength	ASTM D790	8,000 psi	7,800 psi	55 MPa	54 MPa
Flexural Modulus	ASTM D790	225,000 psi	220,000 psi	1,551 MPa	1,517 MPa
Tensile Modulus	ASTM D638	230,000 psi	210,000 psi	1,586 MPa	1,448 MPa
Tensile Strength	ASTM D638	6,700 psi	5,600 psi	46 MPa	39 MPa
Izod Impact Strength (notched)	ASTM D256	1.30 ft-lb/in		70 J/m	
Melting Point	ASTM D 3418	367 °F		186 °C	
Melt Flow Rate (180 sec., 1.0 kg, 235 °C)	ASTM D 1238	—		9 ± 3 g/10 min	

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"

