FIRE RETARDANT PA 11 AND PA 12

FR-106

HIGHLIGHTS

- Fire retardant nylon 11
- Only LS material certified to pass the FAR 25.853 60 second vertical burn requirement
- Parts withstand intense functional testing
- Parts are approved for end-use production applications

APPLICATIONS

- Automotive and aerospace production
- Housing and enclosure assemblies
- Complex thin wall geometries requiring strength and accuracy
- Ideal for low to mid volume production applications

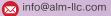
TYPICAL PHYSICAL PROPERTIES

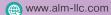
| PROPERTY | TEST METHOD | ENGLISH | METRIC |
|---------------------------------------|-------------------|-------------------------|------------------------|
| Color/Appearance | Visual | White | White |
| Bulk Density | ASTM D1895 | 0.26 oz/in ³ | 0.45 g/cm ³ |
| Average Particle Size (D50) | Laser Diffraction | 0.004 inches | 95 microns |
| Particle Size Range (D10-D90) | Laser Diffraction | 0.002 - 0.006 inches | 45 - 151 microns |
| Sintered Part Density | ASTM D792 | 0.618 oz/in³ | 1.07 g/cm ³ |
| Heat Deflection Temperature | ASTM D648 | 158° F @ 264 psi | 70° C @ 1.82 MPa |
| Heat Deflection Temperature | ASTM D648 | 367° F @ 66 psi | 186° C @ 0.45 MPa |
| Ultimate Tensile Strength (XY) | ASTM D638 | 6,700 psi | 46 MPa |
| Tensile Modulus (XY) | ASTM D638 | 202,000 psi | 1,392 MPa |
| Flexural Modulus (XY) | ASTM D790 | 195,000 psi | 1,345 MPa |
| Elongation at Break (XY) | ASTM D638 | 38 % | 38 % |
| Izod Impact Strength - Notched (XY) | ASTM D256 | 1.3 ft-lb/in | 69 J/m |
| Izod Impact Strength - Unnotched (XY) | ASTM D256 | 3.2 ft-Ib/in | 144 J/m |
| Flammability, 12 Second Vertical Burn | FAR 25.853 | Pass | Pass |
| Flammability, 60 Second Vertical Burn | FAR 25.853 | Pass | Pass |
| | | | |

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.



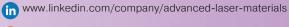


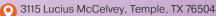






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About RPS

RPS has been in operation over ten years and our engineers collectively have decades of experience working with stereolithography and laser sintering equipment. With proven experience in 3D printing, engineering, electronics, computer-aided engineering and more, we understand the technology and can offer advice on how it can suit your specific application.

We manufacture the **NEO800** stereolithography system, designed, developed and built by RPS engineers. We are also an HP Channel Partner of HP's Multi-Jet Fusion technology and offer a range of materials and software through our partnership with market-leading suppliers ALM, DSM Somos® and Materialise.