## MINERAL FIBER FILLED

# **PA 620-MF**

#### **HIGHLIGHTS**

- Anisotropic mechanical properties
- Excellent combination of strength and temperature resistance
- Good surface finish and feature resolution
- High stiffness properties for load bearing applications

### **APPLICATIONS**

- Housings and enclosures
- Rapid tooling applications
- Aerospace and motor sports
- Ideal for low to mid production parts requiring stiffness and durability at elevated temperatures

#### TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	White	White
Bulk Density	ASTM D1895	0.266 oz/in <sup>3</sup>	0.46 g/cm <sup>3</sup>
Average Particle Size (D50)	Laser Diffraction	0.002 inches	55 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.004 inches	30 - 100 microns
Sintered Part Density	ASTM D792	0.694 oz/in <sup>3</sup>	1.20 g/cm <sup>3</sup>
Heat Deflection Temperature	ASTM D648	355° F @ 264 psi	179° C @ 1.82 MPa
Heat Deflection Temperature	ASTM D648	363° F @ 66 psi	184° C @ 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	7,350 psi	51 MPa
Ultimate Tensile Strength (Z)	ASTM D638	4,900 psi	34 MPa
Tensile Modulus (XY)	ASTM D638	831,000 psi	5,725 MPa
Tensile Modulus (Z)	ASTM D638	434,000 psi	3,000 MPa
Flexural Modulus (XY)	ASTM D790	660,000 psi	4,550 MPa
Flexural Modulus (Z)	ASTM D790	381,000 psi	2,825 MPa
Elongation at Break (XY)	ASTM D638	5%	5%
Elongation at Break (Z)	ASTM D638	3%	3%

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.