## **UNFILLED PA 11 AND PA 12**

**PA 250** 

#### **HIGHLIGHTS**

- Smoothest surface finish nylon 12 with excellent fine feature resolution
- Stabilized against thermal degradation for superior recyclability
- Easily processable with a Multizone Heater upgrade from Integra

#### **APPLICATIONS**

- High detailed production parts
- Prosthetic medical devices
- Ducts, enclosures and connector assemblies
- Ideal for applications needing a cost effective approach for the production of high detailed precision parts

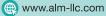
### TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	White	White
Bulk Density	ASTM D1895	0.289 oz/in <sup>3</sup>	0.50 g/cm <sup>3</sup>
Average Particle Size (D50)	Laser Diffraction	0.002 inches	40 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.002 inches	30 - 50 microns
Sintered Part Density	ASTM D792	0.584 oz/in³	1.01 g/cm <sup>3</sup>
Heat Deflection Temperature	ASTM D648	187° F @ 264 psi	86° C @ 1.82 MPa
Heat Deflection Temperature	ASTM D648	354° F @ 66 psi	179° C @ 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	6,671 psi	46 MPa
Ultimate Tensile Strength (Z)	ASTM D638	5,221 psi	36 MPa
Tensile Modulus (XY)	ASTM D638	252,366 psi	1,740 MPa
Dielectric Constant @ 1 KHz	ASTM D150	2.73	2.73
Elongation at Break (XY)	ASTM D638	22 %	22 %
Flexural Modulus	ASTM D790	217,557 psi	1,500 MPa
Izod Impact Strength (notched)	ASTM D256	0.60 ft-lb/in	32 J/m
Hardness (Shore D)	ASTM D2240	73	73

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.

















# **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.