

UNFILLED PA 11 AND PA 12

PA D80-ST

HIGHLIGHTS

- Economical nylon 11
- Parts withstand intense functional testing
- Parts are approved for end-use production applications
- Stabilized against thermal degradation to reduce oxidization of sintered parts

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	Black	Black
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/in ³	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
Elongation at Break (XY)	ASTM D638	38%	38%
Flexural Modulus	ASTM D790	195,000 psi	1,345 MPa
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-lb/in	144 J/m

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.



AN EOS COMPANY

254.773.3080

info@alm-llc.com

www.linkedin.com/company/advanced-laser-materials

3115 Lucius McCelvey, Temple, TX 76504

www.alm-llc.com

@ALM_Global



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.

    +44 (0) 1296 425665 | support@rps.ltd | www.rps.ltd

14 Bridgegate Business Park | Gatehouse Way | Aylesbury | Buckinghamshire | HP19 8XN | UK