



AN EOS COMPANY



PA 803-CF Black

NYLON 11

Highly-Carbon-Fiber-Filled Nylon 11 optimized for high-performance.

HIGHLIGHTS

- High-Detail Black Surface Finish
- Good Stiffness and Mechanical Properties
- Warping Resistance at Elevated Temperatures

APPLICATIONS

- High-Performance Impact Sports Equipment and Racing Applications
- Wind Tunnel Model Testing
- Outdoor Applications Requiring Strength and Toughness



HEADQUARTERS

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TYPICAL PHYSICAL PROPERTIES			
PROPERTY	TEST METHOD	IMPERIAL	METRIC
Color/Appearance	Visual	Black	Black
Bulk Density	ASTM D1895	0.277 oz/in ³	0.48 g/cm ³
Average Particle Size (D50)	Laser Diffraction	0.002 inches	50 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.003 inches	30 - 78 microns
Sintered Part Density	ASTM D792	0.676 oz/in ³	1.17 g/cm ³
Heat Deflection Temperature	ASTM D648	343°F at 264 psi	182°C at 1.82 MPa
Heat Deflection Temperature	ASTM D648	377°F at 66 psi	186°C at 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	12,781 psi	88 MPa
Ultimate Tensile Strength (Z)	ASTM D638	6,447 psi	45 MPa
Tensile Modulus (XY)	ASTM D638	1,191,000 psi	8,211 MPa
Tensile Modulus (Z)	ASTM D638	211,000 psi	1,453 MPa
Elongation at Break (XY)	ASTM D638	8%	8%
Elongation at Break (Z)	ASTM D638	4%	4%

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.