



AN EOS COMPANY



PA 802-CF CN

NYLON 11

Black carbon fiber filled nylon 11 optimized for high performance and certified as carbon neutral through the entire material supply chain all the way to your door.*

HIGHLIGHTS

- Carbon neutral and low emissions
- Black carbon fiber filled nylon 11
- Superior stiffness and mechanical properties
- Excellent resistance to warping at elevated temperatures

APPLICATIONS

- Sustainable applications
- High impact performance racing applications or sports equipment
- Wind tunnel model testing
- Ideal for outdoor applications requiring strength and toughness



HEADQUARTERS

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Responsible
Manufacturing

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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	0.642 oz/in ³	1.11 g/cm ³
Heat Deflection Temperature	ASTM D648	354°F at 264 psi	179°C at 1.82 MPa
Heat Deflection Temperature	ASTM D648	367°F at 66 psi	186°C at 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	10,152 psi	70 MPa
Ultimate Tensile Strength (Z)	ASTM D638	5,946 psi	41 MPa
Tensile Modulus (XY)	ASTM D638	926,501 psi	6,388 MPa
Tensile Modulus (Z)	ASTM D638	210,740 psi	1,453 MPa
Elongation at Break (XY)	ASTM D638	11%	11%
Elongation at Break (Z)	ASTM D638	7%	7%
Flexural Modulus (XY)	ASTM D790	721,998 psi	4,978 MPa
Flexural Modulus (Z)	ASTM D790	17,985 psi	124 MPa

*Also available in non-carbon neutral

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.