



AN EOS COMPANY



PA 605-A

NYLON 12

40% Aluminum-Filled Nylon 12 optimized for easy processing and as a drop-in replacement for comparable aluminum-filled materials.

HIGHLIGHTS

- Metallic-Grey Surface Finish
- Good Thermal and Mechanical Properties
- High Recyclability

APPLICATIONS

- Wind tunnel models and components
- Automotive under hood mechanisms
- Rapid tooling and fixtures



HEADQUARTERS

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NYLON 12

Produces accurate parts with excellent part strength and surface detail.

TYPICAL PHYSICAL PROPERTIES			
PROPERTY	TEST METHOD	IMPERIAL	METRIC
Color/Appearance	Visual	Metallic Gray	Metallic Gray
Bulk Density	ASTM D1895	0.387 oz/in ³	0.67 g/cm ³
Average Particle Size (D50)	Laser Diffraction	0.002 inches	55 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.004 inches	35 - 100 microns
Sintered Part Density	ASTM D792	0.85 oz/in ³	1.47 g/cm ³
Heat Detection Temperature	ASTM D648	279°F at 264 psi	137°C at 1.82 MPa
Heat Detection Temperature	ASTM D648	356°F at 66 psi	180°C at 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	6,236 psi	43 MPa
Ultimate Tensile Strength (Z)	ASTM D638	5,400 psi	37 MPa
Tensile Modulus (XY)	ASTM D638	538,000 psi	3,709 MPa
Flexural Modulus (XY)	ASTM D790	510,000 psi	3,517 MPa
Flexural Strength (XY)	ASTM D790	6,290 psi	44 MPa
Elongation at Break (XY)	ASTM D638	3%	3%
Dielectric Constant	ASTM D150	14.5	14.5
Dielectric Strength	ASTM D149	180 v/mm	180 v/mm

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.