

# PA 830-ESD 12

## **NYLON 11**

This nylon 11 based material uses graphite for its electrostatic-dissipative (ESD) properties and contains no carbon fibers.

#### **HIGHLIGHTS**

- → Electrostatically dissipative nylon 11 without carbon fibers
- → Good tensile strength and toughness
- → Easy to machine, less abrasive, and excellent surface finish

#### **APPLICATIONS**

- → Assembly fixtures semiconductor industry
- → Electronic products
- → Applications requiring ESD capabilities



#### **HEADQUARTERS**

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TYPICAL PHYSICAL PROPERTIES			
PROPERTY	TEST METHOD	IMPERIAL	METRIC
Color/Appearance	Visual	Black with Silver Flakes	Black with Silver Flakes
Bulk Density	ASTM D1895	0.0177 lb/ in <sup>3</sup>	0.49 g/cc
Sintered Density	ASTM D792	0.0397 lb/in <sup>3</sup>	1.1 g/cc
Melt Viscosity (Virgin)	ASTM D1238	0.88 oz/10 min	25 g/10 min
Elongation at Break (XY)	ASTM D638	8%	8%
Tensile Modulus (XY)	ASTM D638	427,000 psi	2944 MPa
Tensile Strength	ASTM D638	4,200 psi	29 MPa
PSD D10-D90 (D50)	Laser Diffraction		31μ-95μ (55μ)
Surface Resistivity (Top Facing Surface $\Omega$ )	ASTM D257	$2.4 \times 10^3 \Omega$ /square	2.4 x 10 <sup>3</sup> Ω/square
Surface Resistivity (Bottom Facing Surface $\Omega$ )	ASTM D257	3.3 x 10 <sup>4</sup> Ω/square	3.3 x 10 <sup>4</sup> Ω/square