

FIBER FILLED

**PA 830-ESD12**

**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

**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/10min	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 Ω)	ASTM D257	2.4 x 10 <sup>3</sup> Ω/square	2.4 x 10 <sup>3</sup> Ω/square
Surface Resistivity (Bottom Facing Surface Ω)	ASTM D257	3.3 x 10 <sup>4</sup> Ω/square	3.3 x 10 <sup>4</sup> Ω/square

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

[www.alm-llc.com](http://www.alm-llc.com)

[info@alm-llc.com](mailto:info@alm-llc.com)

@ALM\_Global

[www.linkedin.com/company/advanced-laser-materials](https://www.linkedin.com/company/advanced-laser-materials)

3115 Lucius McCelvey, Temple, TX 76504