

ALM PA 850-Nat Nylon 11 SLS Prototyping Polymer

Category : Polymer , Rapid Prototyping Polymer , Thermoplastic , Nylon , Nylon 11

Material Notes:

Unfilled PA 11 formulated for easy processing. Can be run as a drop-in replacement for other commercially available PA 11 laser sintering powders. Parts produced from PA 850 exhibit outstanding mechanical properties. Maximum properties may require double scanning, which is the same as for other commercially available PA 11 powders. Good laser power stability is required to process this material. Information provided by Advanced Laser Materials (ALM).

Order this product through the following link:

http://www.lookpolymers.com/polymer_ALM-PA-850-Nat-Nylon-11-SLS-Prototyping-Polymer.php

Physical Properties	Metric	English	Comments
Bulk Density	0.520 g/cc	0.0188 lb/in ³	ASTM D1895
Density	1.03 g/cc	0.0372 lb/in ³	Sintered Part; ASTM D792
Particle Size	50 µm	50 µm	Average D50; Laser Diffraction
	38 - 78 µm	38 - 78 µm	Range (D10 to D90); Laser Diffraction
Melt Flow	26 g/10 min @Load 5.00 kg, Temperature 235 °C	26 g/10 min @Load 11.0 lb, Temperature 455 °F	3 min.; ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	48.0 MPa	6960 psi	XY direction; ASTM D638
Tensile Strength, Yield	37.0 MPa	5370 psi	XY direction; ASTM D638
Elongation at Break	47 %	47 %	XY direction; ASTM D638
Tensile Modulus	1.517 GPa	220.0 ksi	XY direction; ASTM D638
Flexural Strength	46.0 MPa	6670 psi	XY direction; ASTM D790
Flexural Modulus	2.137 GPa	310.0 ksi	XY direction; ASTM D790

Thermal Properties	Metric	English	Comments
Melting Point	189 °C	372 °F	ASTM D3418
Deflection Temperature at 0.46 MPa (66 psi)	188 °C	370 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	48.0 °C	118 °F	ASTM D648

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.3e+13 ohm-cm	1.3e+13 ohm-cm	ASTM D257
Surface Resistance	4.9e+12 ohm	4.9e+12 ohm	ASTM D257
Dielectric Strength	18.5 kV/mm	470 kV/in	ASTM D149

Descriptive Properties	Value	Comments
Color	Natural	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China