

ALM PA 850 Black Nylon 11 SLS Prototyping Polymer

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

Material Notes:

Information provided by Advanced Laser Materials (ALM).

Order this product through the following link:

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

Physical Properties	Metric	English	Comments
Bulk Density	0.500 g/cc	0.0181 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	26 g/10 min	3 min.; ASTM D1238
	@Load 5.00 kg, Temperature 235 °C	@Load 11.0 lb, Temperature 455 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	74	74	ASTM D2240
Tensile Strength at Break	48.0 MPa	6960 psi	XY direction; ASTM D638
Tensile Strength, Ultimate	42.0 MPa	6090 psi	Z direction; ASTM D638
Elongation at Break	14 %	14 %	Z direction; ASTM D638
	51 %	51 %	XY direction; ASTM D638
Tensile Modulus	1.43 GPa	207 ksi	Z direction; ASTM D638
	1.48 GPa	215 ksi	XY direction; ASTM D638

Thermal Properties	Metric	English	Comments
CTE, linear	120 µm/m-°C	66.7 µin/in-°F	ASTM E831
	@Temperature 0.000 - 50.0 °C	@Temperature 32.0 - 122 °F	
Melting Point	342 µm/m-°C	190 µin/in-°F	ASTM E831
	@Temperature 85.0 - 145 °C	@Temperature 185 - 293 °F	
Melting Point	200 °C	392 °F	ASTM D3418

Deflection Temperature at 0.46 MPa Thermal Properties (0.07 [ksi])	188 °C Metric	370 °F English	ASTM D648 Comments
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	50% RH; 500V; ASTM D257
Surface Resistance	4.9e+12 ohm	4.9e+12 ohm	50% RH; 500V; ASTM D257

Descriptive Properties	Value	Comments
Color	Black	

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