

MJF 尼龙 PA12

材料介绍

MJF 尼龙 PA12 是一种比较广泛的打印材料。不需要支撑结构，Multi Jet Fusion 技术使用的 PA 12 材料具有奇妙的颗粒，与激光烧结生产的零件相比，该区域具有更高的密度和更低的孔隙率。这一特性也使 MJF 尼龙 PA 12 成为需要比激光烧结更详细的表面分辨率或更薄壁时的理想选择。



材料特性

[打印尺寸]:380x284x380 毫米

[特点]: 耐化学腐蚀, 耐冲击, 高强度, 紫外线稳定性, 耐热性, 灵活性, 高分辨率, 高细节,

颜色:染成黑色, 纯灰色

优势:无需支撑结构,直接彩色打印零件 良好的物理和机械性能,良好的性价比 交货时间,短 减少浪费

劣势: 有限的材料选择, 表面较粗糙

行业应用推荐: 消费品, 医疗, 箱、眼框、游戏控制器, 假肢, 汽车, 电气应用

材料参数

Category	Measurement	Value	Method
General properties	Powder melting point (DSC)	187 °C/369 °F	ASTM D3418
	Particle size	60 µm	ASTM D3451
	Bulk density of powder	0.425 g/cm ³	ASTM D1895
	Density of parts	1.01 g/cm ³	ASTM D792
Mechanical properties	Tensile strength, max load ⁹ , XY	48 MPa/6960 psi	ASTM D638
	Tensile strength, max load ⁹ , Z	48 MPa/6960 psi	ASTM D638
	Tensile modulus ⁹ , XY	1700 MPa/247 ksi	ASTM D638
	Tensile modulus ⁹ , Z	1800 MPa/261 ksi	ASTM D638
	Elongation at break ⁹ , XY	20%	ASTM D638
	Elongation at break ⁹ , Z	15%	ASTM D638
	Flexural strength (@ 5%) ¹⁰ , XY	65 MPa/9425 psi	ASTM D790
	Flexural strength (@ 5%) ¹⁰ , Z	70 MPa/10150 psi	ASTM D790
	Flexural modulus ¹⁰ , XY	1730 MPa/251 ksi	ASTM D790
	Flexural modulus ¹⁰ , Z	1730 MPa/251 ksi	ASTM D790
Thermal properties	Izod impact notched (@ 3.2 mm, 23°C), XYZ	3.5 kJ/m ²	ASTM D256 Test Method A
	Heat deflection temperature (@ 0.45 MPa, 66 psi), XY	175 °C/347 °F	ASTM D648 Test Method A
	Heat deflection temperature (@ 0.45 MPa, 66 psi), Z	175 °C/347 °F	ASTM D648 Test Method A
	Heat deflection temperature (@ 1.82 MPa, 264 psi), XY	95 °C/203 °F	ASTM D648 Test Method A
Recyclability	Heat deflection temperature (@ 1.82 MPa, 264 psi), Z	106 °C/223 °F	ASTM D648 Test Method A
	Refresh ratio for stable performance	20%	
Certifications	USP Class I-VI and US FDA guidance for Intact Skin Surface Devices, RoHS ¹¹ , EU REACH, PAHs		

	HP 3D High Reusability PA 12	HP 3D High Reusability PA 12 Bundle 12 units	HP 3D High Reusability PA 12
Product Number	V1R10A	V1R15A	V1R16A
Weight	13 kg	156 kg	130 kg
Capacity	30L ¹²	360L ¹²	300L ¹²
Dimensions (xyz)	600 x 333 x 302 mm	600 x 333 x 302 mm	800 x 600 x 1205 mm
Compatibility	HP Jet Fusion 3D 4210/4200/3200 Printing Solution	HP Jet Fusion 3D 4200 Printing Solution	HP Jet Fusion 3D 4210/4200 Printing Solution