

MJF Materials

PA12

General Properties

Measurement	Test Method	Value
Powder Melting Point (DSC)	ASTM D3418	186°C / 367°F
Particle Size	ASTM D3451	58µm
Powder Density	ASTM D1895	0.48 g / cm ³ (0.017 lb / inch ³)
Component Density	ASTM D792	1.3 g / cm ³ (0.047 lb / inch ³)

Mechanical Properties

Tensile Strength, maximum load 17, XY	ASTM D638	30 MPa/4350 psi
Tensile Strength, maximum load 11, Z	ASTM D638	30 MPa/4350 psi
Tensile Strength, MPa	ASTM D638	2900 MPa/421 ksi
Tensile Modulus, MPa	ASTM D638	2900 MPa/406 ksi
Elongation at break	ASTM D638	6.5%
Impact strength notched Izon, J/m	ASTM D256	2.7 KJ/m ²

Thermal Properties

Heat deflection, °C(0.45 MPa, 66 psi), Z	ASTM D648	173°F/344°F A
Heat deflection, °C (1.82 MPa, 264 psi), Z	ASTM D648	121°F/250°F