

MATERIAL DATA SHEET: MJF

Material	Composition
MJF	NYLON PA 12

Material Properties		Test Method
Density	1.01 g/cm ³	ASTM D792
Tensile strength,max load	48 Mpa (XYZ)	ASTM D638
Tensile modulus	1700 Mpa (XY) 1800 Mpa (Z)	
Elongation at break	20% (XY) 15% (Z)	
Flexural modulus	1730 Mpa (XYZ)	ASTM D790
Flexural strength	65 Mpa 8XY) 70 Mpa (Z)	
Izod-Notched impact strength	3.5 kJ/m ² (@3.2mm 23°C XYZ)	ASTM D256 Test method A
Heat deflection temperature	175 °C (@0.45 Mpa XYZ)	ASTM D648 Test method A
Heat deflection temperature	95 °C (@1.82 Mpa XYZ)	
Melting point	187 °C	ASTM D3418

Design Guidelines			
Maximum printable size X x Y x Z (grey natural)	369x369X273 mm	Minimum wall tickness	0.5 - 1 mm
Maximum printable size X x Y x Z (dyed black)	369x369X273 mm	Minimum wires	0.8 mm
Construction support required	No	Layer tickness	80 µm
Minimum size details	0.25 mm	Accuracy	± 0.3% ± 0.2 mm min
Interlocking parts	YES	Minimum space assembly	0.5 mm
Enclosed parts	YES	Clearance	0.5 mm