

# Nylon PA12

Poliammide 12, Nylon 12

Nylon PA12 MJF is a versatile material that allows you to quickly make prototypes and functional parts (1 to 10,000 parts in 3 days). It is a real alternative to injection molding and gives you absolute design freedom.



## Material properties

Density	ASTM D792	1,01	g/cm <sup>3</sup>
Water absorption at saturation	ISO 62	1,50	%
Hygroscopicity	ISO 62	0,70	%
Suitability for food contact	CE 1935/2004 – 10/2011	NO	
Tensile strength	ASTM D638	48	MPa
Elongation at break	ASTM D638	20	%
Yield strength	ISO 527	40	MPa
Elastic modulus	ASTM D638	1700	MPa
Flexural strength	ASTM D790	70	MPa
Resilience	ISO 179	45	kJ/m <sup>2</sup>
Hardness	ASTM D2240	80 D	Shore
HDT 0.45 MPa	ASTM D648	175	°C
HDT 1.8 MPa	ASTM D648	95	°C
Vicat softening temperature	ISO 306	175	°C

### Printing layer height

0,08 mm (0,003 in)

### Maximum dimensions

380x284x380 mm (15x11.2x15 in)

### Tolerances

± 0,30mm < 100mm / ± 0,3% > 100mm

### Applications

For functional prototypes and final parts. Excellent chemical resistance to oil, grease, hydrocarbons. Excellent base for subsequent surface finishes. US FDA guidance for Intact Skin Surface Device, Statement of Composition for Toy Applications.

### Certifications

USP class VI - RoHS - REACH - PAHs - UL94 - UL746A - Declaration of composition for applications on toys

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<b>Melting temperature</b>	ASTM D3418	<b>187</b>	°C
<b>Flammability</b>	UL94	<b>HB</b>	
<b>Thermal conductivity (20°C)</b>	ISO 22007	<b>0,23</b>	W/mK
<b>Volumic electrical resistivity</b>	UL746A / ASTM D257	<b>10<sup>12</sup></b>	Ω*m

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