

NYLON 6/66/12 · Technical Data Sheet

General Features

Chemical Name Polyamides 6-66-12	Benefits <ul style="list-style-type: none"> • Good adhesion to the printing surface • Possibility to use a layer fan for even finer details or printing long bridges • Low warping, allowing better printing • Strong as nylon, but with greater flexibility 	Applications <p>Parts that need to be very strong with tensile resistance, or strong parts with fine details. Covers subject to mechanical stress and shock. Models of structures such as drones, rockets, airplanes. Structural supports.</p>
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Filament Characteristics

Diameter	Ø 1.75mm	Ø 2.85mm
Meters per spool	278.4m	105.02m
Weight per meter	2.69g	7.141g
Tolerance	±0.02mm	±0.03mm

Material Properties

		Typical value	ASTM Method
Relative viscosity (96% H2SO4)	-	188	JIS K6810
Melting point	° C	3,93	ISO 11357
Tensile strenght at yield	MPa	21 - 25	ISO 527-3
Tensile strenght at break	MPa	115 - 135	ISO 527-3
Tensile elongation at break	%	495 - 515	ISO 527-3
Tensile modulus	MPa	400 - 500	ISO 527-3
Tear resistance	N	2,2 - 2,4	ASTM D 1922
Puncture energy	mJ	33 - 35	JAS P - 1019
Puncture deformation	mm	10,5 - 11,5	JAS P - 1019
Spencer impact resistance	mJ	850 - 950	ASTM D 3420

Recommended printer settings

Print temperature	245±5°C
Print bed temperature	100° First/ Later
Cooling fans	Off / Low in bridges
Closed environment	Required
Adhesive	Required

Available Colours

Colour	Pantone Code
Natural	--

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