

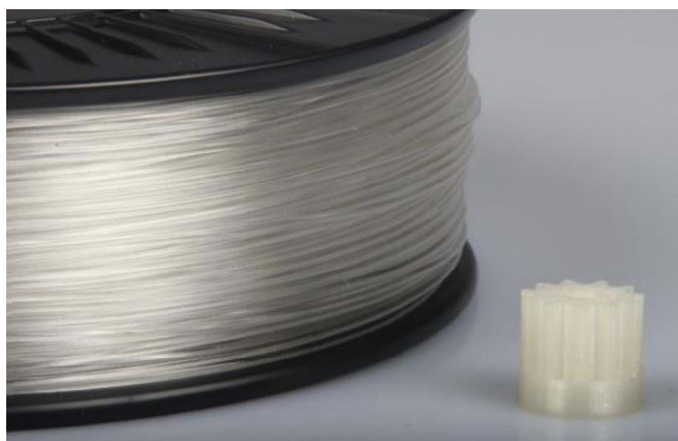


Product datasheet

ENGLISH

PA12 NYLON

PA12 NYLON is a high performance polyamide filament which natural colour is crystal clear. The polymer nylon PA12 is widely used in the automotive, machinery and engineering industry since it combines mechanical strength, flexibility, transparency, UV resistance and superior chemical resistance. PA12 NYLON is easy to print, has a high impact strength, even at low temperatures, a very high glass transition temperature and has a low water absorption compared with other polyamides which leaves the mechanical properties unaffected. PA12 NYLON is the filament to print objects with a top performance



Dimensions

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

Physical properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,02 g/cc
Viscosity number (in relation to PA12)	ISO 307	160± 10 cm ³ /g (Medium viscous)
Tensile strength	ISO 527	60 Mpa
Strain at break	ISO 527	>50%
Tensile modulus	ASTM D638	1400 Mpa
Impact strength Charpy method 23°C	ISO 179	Unnotched No B Notched 14 KJ/m ²
Shore Hardness	ISO 868	81

Thermal properties

Description	Testmethod	Typical value
printing temp.	-	255-275°C
melting temp. DSC2	-	245°C
vicat softening temp. Method A 10N	ISO 306	137°C

Features:

- Strong & flexible
- Crystal clear natural colour
- Superior chemical & UV resistance
- Low water absorption

Packaging: PA12 NYLON is available in nearly any type of packaging and labelling, but will be supplied always in a vacuum bag, due to the moisture sensitivity of PA12 NYLON. Ask our team to help you customizing your product.

Additional info: PA12 NYLON needs to be dried for good 3D print results, A standard air-circulated oven is sufficient. A guideline for drying is 2-3 hours at 110-130°C for 100 gram (Beware that the reel can only be heated up to 60°C. In such cases please double the drying time). Recommended temperature for heated bed is ± 100-110°C or even higher. PA12 NYLON will not bond to glass, but adheres well to masonite, poplar wood or blue painters tape. PA12 NYLON can be used on most common desktop FDM or FFF technology 3D printers. Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.