

PA-CX12

PA-CX12 is our high-performance nylon filament with a broad range of mechanical and chemical properties. These properties include, but are not limited to, high impact (even at low temperatures), crack & scratch resistance, food / water contact acceptable, superior chemical & weathering resistance backed by a very low water absorption and excellent dimensional stability. PA-CX12 is the perfect nylon filament for the (semi)professional print user who is looking for the perfect combination of printability and mechanical properties.

Material features:

- High-performance industrial grade nylon
- Strong & Flexible
- High impact, abrasion, crack & scratch resistance
- Superior chemical & UV resistance
- Excellent dimensional stability
- Low water absorption
- Food Contact Approved



Colours:

PA-CX12 is available from stock in clear, white and black. Other colours on request

cl1 bk1 wh1

Packaging:

PA-CX12 is available in nearly any type of packaging and labelling, but will always be supplied in a vacuum bag, due to the moisture sensitivity of Polyamides. Ask our team to help you customizing your product.

Filament specs.

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

Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,02 g/cc
MFI 280°C/2,16 kg	ISO 1133	15 g/10 min
Tensile strength at yield	ISO 527	60 MPa
Elongation strain at yield	ISO 527	8%
Elongation strain at break	ISO 527	50%
Tensile (E) modulus	ISO 527	1400 MPa
Impact strength - Charpy notched 23°C	ISO 179	14 kJ/m2
Moisture absorption	ISO 62	3,5%
Printing temp.	Internal method	260±10°C
Melting point	ISO 11357	250±10°C
Vicat softening temp.	ISO 306 B50	110°C
Shore hardness	ISO 868	81D

Additional info:

PA-CX12 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 (Do not apply a load to the spool when drying, or else the spool can deform. Check if your spool shows signs of deformation. If so, lower the temperature). Recommended temperature for heated bed is ≥100°C or even higher. PA-CX12 will not bond perfect to glass but adheres well to a variety of "print stickers" and other bed adhesives. PA-CX12 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.

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