

# NYLON

NYLON is a versatile material, it has properties including, 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. NYLON is the perfect nylon filament for the (semi)professional print user who is looking for the perfect combination of printability and mechanical properties. NYLON is one of the best solutions for industrial grade applications that need to last. NYLON is also food contact approved.

## 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

### Filament specs.

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

### Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,02 g/cc
MFR 280°C/2,16 kg	ISO 1133	15 g/10 min
Tensile strength at yield	ISO 527	60 Mpa
Strain at yield	ISO 527	8%
Strain at Break	ISO 527	>150%
Tensile modulus	ISO 527	1400 Mpa
Impact strength - Charpy notched 23°C	ISO 179	14 kJ/m <sup>2</sup>
Moisture absorption	ISO 62	3,5%
Printing temp.	DF	250±10°C
Melting point	ISO 11357	250°C
Shore D Hardness	ISO 868	81

## Additional info:

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 (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 80-100°C or even higher. NYLON will not bond perfect to glass, but adheres well to a variety of "print stickers" and other bed adhesives. 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.