

ICE FILAMENTS ICE-Nylon PRODUCT CARD

ICE Filaments ICE-Nylon 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 temperature), crack & scratch resistance, food/water contact acceptable, superior chemical & weathering resistance backed by a very low water absorption and excellent dimensional stability. ICE-Nylon is the perfect nylon filament for the (semi)professional print user who is looking for the perfect combination of printability and mechanical properties. ICE-Nylon is one of the best solutions for industrial grade applications that need to last.

FEATURES:

- ∞ High-performance
- ∞ Strong and flexible
- ∞ High impact, abrasion
- ∞ Crack & scratch resistant
- ∞ Superior chemical & UV resistance
- ∞ Excellent dimensional stability
- ∞ Low water absorption



COLOURS:

ICE Filaments ICE-Nylon is available from stock in a variety of colors. Other colors on request.



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
MFR 280°C/2,16 kg	ISO 1133	15cm ³ /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
Flexural Modulus	ISO 178	1700 MPa
Flexural Strength	ISO 178	90 MPa
Impact Strength – Charpy notched 23°C	ISO 179	14 kJ/m ²
Moisture absorption	ISO 62	3,5%
Printing temperature	ICE FILAMENTS	240 – 260°C
Melting points	ISO 11357	250°C
Shore D Hardness	ISO 868	81

ADDITIONAL INFO:

ICE-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 100gr. Do not place the spool in the oven, only the filament. Recommended heated bed temperature is 80 – 100°C or even higher.

ICE-Nylon will not bond perfect to glass, but adheres well to a variety of print stickers or other print bed adhesives.

ICE-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 shelf life significantly.