TECHNICAL DATA SHEET

Date of issue: 08.11.2018 | Update: 22.06.2021 | Version: 4.00

Z-NYLON

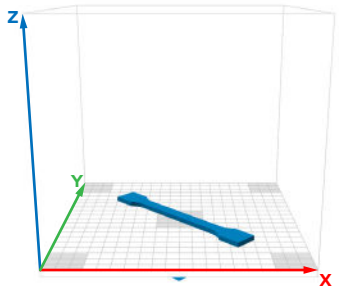
Z-NYLON is a versatile material that exhibits high impact and abrasion resistance. Its properties also include resistance to high temperatures and moderate chemical substances. All these characteristics will bring the highest benefit to engineers and users from various industry fields during the preparation of functional prototypes. What's more, models printed with Z-NYLON can be post-processed with tools meant for machining metals and can easily be painted. Z-NYLON is fully suited for technical and mechanical parts, such as toothed gears, guides, slide bearings, or functional tools. Z-NYLON is available in two colors.

Mechanical Properties	Metric	Imperial	Test Method
Tensile Strength	33.22 MPa	4820 psi	ISO 527:1998
Breaking Stress	29.81 MPa	4320 psi	ISO 527:1998
Elongation at max Tensile Stress	9.17%	9.17%	ISO 527:1998
Elongation at Break	23.62%	23.62%	ISO 527:1998
Bending Stress	38.30 MPa	5550 psi	ISO 178:2011
Flexural Modulus	781.01 MPa	113 ksi	ISO 178:2011
Izod Impact, Notched	12.81 kJ/m^2	6.10 ft-lb/in^2	ISO 180:2004
Thermal Properties	**Metric**	**Imperial**	**Test Method**
Melting Point	172.81° C	343° F	ISO 11357-3:2014
Heat deflection temperature	130° C (0.45 MPa)	266° F (65.3 psi)	ISO 75-2/B
Other Properties	**Metric**	**Imperial**	**Test Method**
Melt Flow Rate	9.23 g/10 min Load 5.00 kg Temperature 235° C	0.0204 lb/10 min Load 11.00 lb Temperature 455° F	ISO 1133:2006
Specific Density	1.027 g/cm^3	8.57 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	62	62	ISO 868:1998

The data presented in this document are intended for information and comparison purposes only. They should not be used for project specifications or its quality evaluation. The material's actual properties depend on the printing process conditions, the design structure and its purpose, test conditions, etc.

Samples of Z-NYLON used to carry out the tests were built on Zortrax M200 Plus.
The general print parameters utilized are noted below:

Z-SUITE: v2.7.2
Layer thickness: 0.19 mm;
Quality: High;
Seam: Normal;
Infill: Solid,
Fan Speed: Auto;
Surface Layers:
- Top: 7 (default);
- Bottom: 4 (default);



Product specifications are subject to change without notice.

Each user is responsible for complying with product safety standards, its intended use as well as the law and waste disposal (and recycling) rules for electrical and electronic equipment. Zortrax does not make any express or implied warranties, including but not limited to implied warranties of merchantability or fitness for a particular purpose.

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