

# TECHNICAL DATA SHEET

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## Naturally Precise

Z-PLA is an ecological material which is derived from natural, biodegradable resources. Its main advantages include a very low shrinkage rate and a high degree of hardness. Freedom of creating to shapes and complexity of models, Z-PLA gives you the possibility to print high-quality parts, detailed conceptual objects, and even consumer goods. Its smooth surface will also provide exceptional aesthetics for mock-ups, decorative elements, and educational models. Z-PLA has become a popular choice for environment-friendly 3D printing.



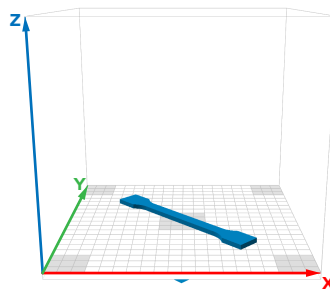
Mechanical Properties	Metric	English	Test Method
Tensile Strength	47.95 MPa	6950 psi	ISO 527:1998
Breaking Stress	46.53 MPa	6750 psi	ISO 527:1998
Elongation at max Tensile Stress	3.80%	3.80%	ISO 527:1998
Elongation at Break	4.32%	4.32%	ISO 527:1998
Bending Stress	56.80 MPa	8240 psi	ISO 178:2011
Flexural Modulus	1.47 GPa	213 ksi	ISO 178:2011
Izod Impact, Notched	3.14 kJ/m <sup>2</sup>	1.49 ft-lb/in <sup>2</sup>	ISO 180:2004
Thermal Properties	Metric	English	Test Method
Glass Transition Temperature	57.06° C	135° F	ISO 11357-3:2014
Other Properties	Metric	English	Test Method
Melt Flow Rate	14.48 g/10 min Load 2.16 kg Temperature 190° C	0.0319 lb/10 min Load 4.76 lb Temperature 374° F	ISO 1133:2006
Specific Density	1.292 g/cm <sup>3</sup>	10.8 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	79.8	79.8	ISO 868:1998

Compatible with	Layer Thickness Range		Available Colors				
ZORTRAX INVENTURE	0.09 mm	0.0035 in					
	0.14 mm	0.0055 in	blue	yellow	green	grey	white
	0.19 mm	0.0075 in					
			black				

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-PLA used to carry out the tests were built on Zortrax M200.  
The general print parameters utilized are noted below:

Z-SUITE: v2.2.0.0  
 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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