

# TECHNICAL DATA SHEET

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# Z-ULTRAT Plus

## Reinforced Resistance

Z-ULTRAT Plus is a material which combines high impact resistance and improved adhesion between individual layers in models. Its qualities provide enhanced durability of 3D printed items, allowing you to create complex mechanisms and strong end-use parts. Z-ULTRAT Plus is based on ABS and therefore is a perfect alternative for this widely known and used by the industry thermoplastic. This material becomes the best choice for many areas, including automotive or manufacturing, where prototypes require high tolerance during impact tests.

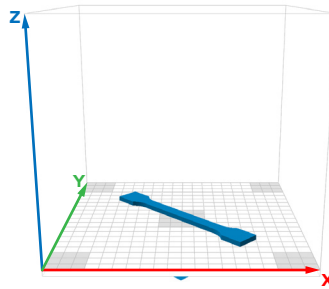


Mechanical Properties	Metric	Imperial	Test Method
Tensile Strength	32.02 MPa	4640 psi	ISO 527:1998
Breaking Stress	31.32 MPa	4540 psi	ISO 527:1998
Elongation at max Tensile Stress	3.41%	3.41%	ISO 527:1998
Elongation at Break	3.44%	3.44%	ISO 527:1998
Bending Stress	51.7 MPa	7500 psi	ISO 178:2011
Flexural Modulus	1.51 GPa	219 ksi	ISO 178:2011
Izod Impact, Notched	7.71 kJ/m <sup>2</sup>	3.67 ft-lb/in <sup>2</sup>	ISO 180:2004
Thermal Properties	Metric	Imperial	Test Method
Glass Transition Temperature	70.19° C	158° F	ISO 11357-3:2014
Other Properties	Metric	Imperial	Test Method
Melt Flow Rate	108.1 g/10 min Load 5 kg Temperature 260° C	0.238 lb/10 min Load 11 lb Temperature 500° F	ISO 1133:2006
Specific Density	1.141 g/cm <sup>3</sup>	11.9 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	67	67	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-ULTRAT Plus used to carry out the tests were built on Zortrax Inventure. The general print parameters utilized are noted below:

Z-SUITE: v2.3.1.0  
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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