

# TECHNICAL DATA SHEET

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# Z-ULTRAT

## Durability Comes in Colors

Z-ULTRAT is a material characterized by high impact resistance, which gives your models a uniform surface texture. This all-purpose material allows you to 3D print elements requiring durability, such as end-use parts, which, after continued use, keep their initial shape over time. With Z-ULTRAT, you can produce objects with properties comparable to those of models manufactured using injection molding technology, including functional prototypes, test casings, and mechanical parts. Z-ULTRAT allows you to test your tailor-made projects in unlimited ways, in one of twenty-two shades.

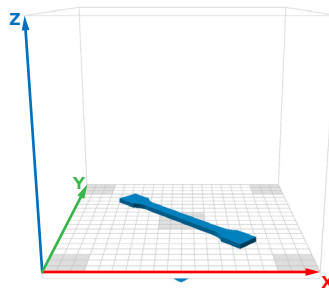


Mechanical Properties	Metric	Imperial	Test Method
Tensile Strength	32.60 MPa	4730 psi	ISO 527:1998
Breaking Stress	30.70 MPa	4450 psi	ISO 527:1998
Elongation at max Tensile Stress	3.78%	3.78%	ISO 527:1998
Elongation at Break	4.87%	4.87%	ISO 527:1998
Bending Stress	54.00 MPa	7830 psi	ISO 178:2011
Flexural Modulus	1.85 GPa	268 ksi	ISO 178:2011
Izod Impact, Notched	5.26 kJ/m <sup>2</sup>	2.50 ft-lb/in <sup>2</sup>	ISO 180:2004
Thermal Properties	Metric	Imperial	Test Method
Glass Transition Temperature	106.40° C	224° F	ISO 11357-3:2014
Other Properties	Metric	Imperial	Test Method
Melt Flow Rate	43.88 g/10 min Load 5 kg Temperature 260° C	0.0968 lb/10 min Load 11 lb Temperature 500° F	ISO 1133:2006
Specific Density	1.179 g/cm <sup>3</sup>	9.84 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	73.4	73.4	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 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.

**zortrax**

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