

# TECHNICAL DATA SHEET

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## See What's Within

**Z-GLASS** is a material with unparalleled properties that will allow you to successfully replace brittle glass elements in your functional prototypes and show what is within them. Its low shrinkage level makes it possible to 3D print defect-free models which will be durable and scratchproof, including automotive and electronics objects. With Z-GLASS, you can create light-transmitting objects that will remain unaffected by heavy exposure to light (high UV resistance) or most acids and alcohols, and weak alkalis. All these advantages make this material ideal not only for industrial sector but also for creating interior design elements.

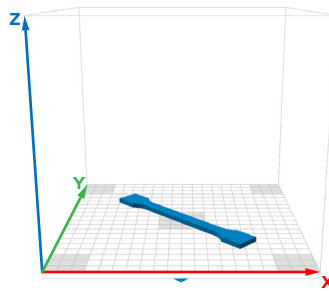


Mechanical Properties	Metric	Imperial	Test Method
Tensile Strength	39.57 MPa	5740 psi	ISO 527:1998
Breaking Stress	34.61 MPa	5020 psi	ISO 527:1998
Elongation at max Tensile Stress	5.94%	5.94%	ISO 527:1998
Elongation at Break	6.74%	6.74%	ISO 527:1998
Bending Stress	55.40 MPa	8040 psi	ISO 178:2011
Flexural Modulus	1.17 GPa	170 ksi	ISO 178:2011
Izod Impact, Notched	2.88 kJ/m <sup>2</sup>	1.37 ft-lb/in <sup>2</sup>	ISO 180:2004
Thermal Properties	Metric	Imperial	Test Method
Glass Transition Temperature	78.06° C	173° F	ISO 11357-3:2014
Other Properties	Metric	Imperial	Test Method
Melt Flow Rate	199.5 g/10 min Load 2.16 kg Temperature 280° C	0.440 lb/10 min Load 4.76 lb Temperature 536° F	ISO 1133:2006
Specific Density	1.409 g/cm <sup>3</sup>	11.8 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	72.2	72.2	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-GLASS 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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