

## **Enduring Results**

**Z-PETG** is an industrial-grade material which offers outstanding resistance to impact of time, most acids and alcohols, and weak alkalies. Its properties include durability and tensile strength. Z-PETG is the best choice for prototypes which will undergo real crash tests, including industrial trials that involve oils and greases. Z-PETG is a blend of the popular PET material and glycol. This helped to eliminate the brittleness of models and boost their durability. Z-PETG will support your innovative ideas with its low shrinkage level, and allow you to create prototypes of complex mechanisms, automotive parts, and manufacturing tools unaffected by some chemicals.



Mechanical Properties	Metric	Imperial	Test Method
Tensile Strength	40.18 MPa	5830 psi	ISO 527:1998
Breaking Stress	37.27 MPa	5410 psi	ISO 527:1998
Elongation at max Tensile Stress	5.83%	5.83%	ISO 527:1998
Elongation at Break	6.39%	6.39%	ISO 527:1998
Bending Stress	55.30 MPa	8020 psi	ISO 178:2011
Flexural Modulus	1.39 GPa	202 ksi	ISO 178:2011
Izod Impact, Notched	3.27 kJ/m <sup>2</sup>	1.56 ft-lb/in <sup>2</sup>	ISO 180:2004
Thermal Properties	Metric	Imperial	Test Method
Glass Transition Temperature	77.65° C	172° F	ISO 11357-3:2014
Other Properties	Metric	Imperial	Test Method
Melt Flow Rate	20.02 g/10 min Load 2.16 kg Temperature 230° C	0.0441 lb/10 min Load 4.76 lb Temperature 446° F	ISO 1133:2006
Specific Density	1.295 g/cm <sup>3</sup>	10.8 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	71.4	71.4	ISO 868:1998

## TECHNICAL DATA SHEET

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-PETG 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 S.A.** Lubelska 34, 10-409 Olsztyn, Poland NIP: 7393864289 REGON: 281551179 Contact Office: office@zortrax.com Sales Department: sales@zortrax.com Support Center: support@zortrax.com

©2020 Zortrax S.A. All rights reserved. All trade names, logos and trademarks mentioned in the following document are registered trademarks of Zortrax and are subject to legal protection.



