

## **Ultimate Resistance**

**Z-PCABS** is a unique blend which combines the properties of two materials: ABS and polycarbonate (PC). Its advantages include high mechanical durability, and resistance to various factors, including high temperatures. Z-PCABS is perfectly suited for industrial use as it allows you to test your prototypes and end-use parts regardless of extreme conditions. You will benefit from this fusion of materials while creating housings of everyday tools, constructional elements of various equipment, and automotive components which will remain stable and fully functional over time.



Mechanical Properties	Metric	Imperial	Test Method
Tensile Strength	36.89 MPa	5350 psi	ISO 527:1998
Breaking Stress	34.76 MPa	5040 psi	ISO 527:1998
Elongation at max Tensile Stress	6.93%	6.93%	ISO 527:1998
Elongation at Break	8.56%	8.56%	ISO 527:1998
Bending Stress	58.40 MPa	8470 psi	ISO 178:2011
Flexural Modulus	1.27 GPa	184 ksi	ISO 178:2011
Izod Impact, Notched	11.40 kJ/m <sup>2</sup>	5.42 ft-lb/in <sup>2</sup>	ISO 180:2004
Thermal Properties	Metric	Imperial	Test Method
Glass Transition Temperature	104.1° C	219° F	ISO 11357-3:2014
Other Properties	Metric	Imperial	Test Method
Melt Flow Rate	30.07 g/10 min Load 5 kg Temperature 260° C	0.0663 lb/10 min Load 11 lb Temperature 500° F	ISO 1133:2006
Specific Density	1.139 g/cm <sup>3</sup>	9.51 lb/gal	ISO 1183-3:2003
Shore Hardness (D)	73.0	73.0	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-PCABS 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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