

# **ZOTTRAX M200 MATERIALS**





# **Z-ULTRAT®** Prototype strong, durable parts

Versatile material suitable for printing many different types of models. It is perfect for prototyping models with features similar to products manufactured in the injection molding technology. It's also suitable for mechanical and chemical post-processing. Objects 3D printed with Z-ULTRAT are strong, stable and time resistant. Z-ULTRAT properties are suitable for use in the evaluation of the object before starting mass production.

#### **APPLICATIONS**

- > Functional prototypes
- > End use parts
- > Casing prototypes for testing
- > End use casing parts for low volume production
- > Prototypes of consumer products
- > Mechanical parts
- Parts simulating properties of elements made in injection molding
- > Elements required to be durable and stable over time





## **Z-HIPS**® Create factory-like casing prototypes

Material with outstanding resistance to warping during 3D printing process. Thanks to this feature Z-HIPS is excellent for making large elements such as: housing prototypes, bigger parts or architecture mockups. It has unique matte texture, which absorbs light and reduces visibility of minor flaws, giving casings prototypes real commercial look. Z-HIPS is also resistant to solvents.

#### **APPLICATIONS**

- > Models with large, flat surfaces
- > Architecture mockups
- > Casing elements for testing
- > Prototypes of mechanical parts
- > Prototypes of consumer products
- Parts requiring resistance to acetone and solvents



Natural Transparent

### **Z-GLASS®** Make and test translucent elements

Material with translucent structure, great for prototypes of products, which are dedicated to be manufactured from glass or translucent plastic. Thanks to light-transmitting surface, Z-GLASS is applicable in automotive, industrial design and architecture projects. It is also resistant to salts, acids and alkalis, which makes it perfect for creating mechanical parts exposed to chemicals.

#### **APPLICATIONS**

- > Concept models which are to imitate glass or translucent plastic
- > Functional prototypes of translucent objects
- > Translucent decorative elements
- > Parts required to be resistant to salts, acids or alkalis



# **Z-ABS**® 3D print in multiple colors

Economical material for basic applications. Good for printing concept models and mockups for display. Wide range of colors gives the ability to choose different material options for 3D printing gadgets and figurines. Z-ABS is a great solution for beginners.

#### **APPLICATIONS**

- > Concept models
- > Gadgets and figurines
- > Display models
- > Models with moderate functional and testing properties



# zortrax inventure materials



#### **Z-ULTRAT** Plus®

# Prototype complex, precise parts

Material available in cartridge system, dedicated to Zortrax Inventure 3D printer. It has features required to create complex and demanding prototypes. In combination with LPD Plus technology, Z-ULTRAT Plus gives the ability to 3D print advanced and moving parts in just one element.

#### **APPLICATIONS**

Yellow

- > Functional prototypes
- > End use parts

Blue

- > Complex moving parts 3D printed as one element
- > Prototypes reflecting properties and look of end use products

Ivory

Pure Black Red

- > Advanced and complex architecture mockups
- > Small elements with many details
- > Parts requiring high dimensional accuracy

Green Cool Grey

- Mechanical parts
- > Models with complex shape, difficult to obtain in other rapid prototyping technologies



#### zortrax inventure

Our most innovative printer so far. Coming Fall 2015

# Zortrax Materials Comparison

Material	Z-ULTRAT	Z-HIPS	Z-GLASS	Z-ABS	Z-ULTRAT Plus
Туре	Spool				Cartridge
Dedicated to	Zortrax M200				Zortrax Inventure
Technology	LPD				LPD Plus
Support material structure	Printed with the same material, mechanically removed				Printed with separate material, soluble in water
Hardware requirements	×	×	Hotend V2	×	<u> </u>
Surface	Semi-mat	Mat	Gloss and translucent	Mat	Semi-gloss
Hardness	High	Low	Medium	Medium	
Elasticity	Medium	Medium	High	Medium	 Medium
Impact strengh	Medium	High		Medium	High
Tensile strengh	Low	High	High	Low	Low
Shrinkage	Low	Very low	Very low	Medium	Low
Mechanical treatment	$\overline{}$	$\vee$	$\overline{}$	$\checkmark$	$\overline{\hspace{1cm}}$
Chemical treatment (acetone)	<b>√</b>	×	×	$\overline{}$	$\overline{\hspace{1cm}}$
Resistance to	-	Solvents	Salts Acids Alkalis	-	-

#### NOTE

Final results of 3D printed models depend on many factors such as: proper preparation of a 3D model for 3D printing, selecting optimal type of material, selecting optimal settings in Z-SUITE software, maintenance and calibration of the 3D printer, proper preparation and calibration of the platform, use of side covers (in case of Zortrax M200 3D printer).

Zortrax S.A. is not responsible for any damage of machines and low printing quality caused by the use of different materials than authorized by Zortrax S.A.

Color of the materials presented in the offer may differ depending on the way of presentation (screen settings, type of print or paper), production batch or way of storage (exposition to light or other external factors).

Materials should be stored in its original packaging (foil protecting from light and moisture) before they are used.

# Powerful range of additive manufacturing materials that maximize benefit of 3D printing for various industries



Automotive & Aerospace



Industrial Design



Architecture



Production Engineering



Education



Consumer Products

# Zortrax Ecosystem

Zortrax products are a complete package of integrated solutions – professional 3D printers, compatible materials, and dedicated software. Thanks to this, our 3D printers achieve high quality prints, dimensional accuracy and repeatability, while eliminating the hassle of adjusting equipment from third-party materials or software. The Zortrax Ecosystem is everything you need in one smart box.







# Z-SUITE software

Perfectly integrated with the machine, helps convert 3D model files and it's compatible with most of 3D design software.

# Printing materials

A wide range of carefully picked colors, only quality materials, exceptional printing features.

## 3D printer

Zortrax M200 and Zortrax Inventure. Reliable and almost maintenance-free, working out of the box, tested by thousands of users worldwide.

Only dedicated Zortrax Materials guarantee high quality prints.



The international 3D Hubs community has awarded Zortrax M200 a title of the best Plug & Print 3D printer.

# zortrax

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