

zDental IDB

Instruction for Use

Product Discription:

zDental IDB is a light-curing resin for the production of indirect bonding tray using 3D LCD printers utilizing wavelengths between 385nm–405nm. IDB Trays printed with this resin have excellent precision, excellent physical properties, superior fit and easy-cleaning.

Intended Use:

Orthodontic indirect bonding trays

Color and Package:

Colorless clear, 500ml/bottle

Contra-indications:

zDental IDB contains (meth)acrylate and phosphine oxide which can cause allergic reactions at skin contact. In case of an allergic reaction, please contact a medical physician.

Use and Safety Information:

1. Wear nitrile rubber gloves and a face mask when using this resin.
2. Keep the room ventilated.
3. Swallowing such as eating and drinking is forbidden in the printing place.
4. Avoid liquid or uncompletely cured resin directly contact with skin. If contact with skin occurs, wipe resin away and wash thoroughly with cold water, use hand sanitizer or soap to assist in washing. If the users still feel uncomfortable, please see a doctor immediately.
5. If the user accidentally splashes the resin in the eyes, flush with plenty of water and seek medical attention immediately.
6. More safety details please refer MSDS of this resin.
7. The good using temperature for this resin is 21 – 25 °C . Keep the resin away from direct sunlight or any kind of UV light.

Processing printed parts:

Mixing resin before using:

In Bottle: Shake bottle vigorously prior to pouring into resin tank.

In resin tank: Stir resin with a soft spatula. Take care not to damage the film of the resin tank.

After the part is printed, it is recommended to restore the remaining resin into bottle and avoid leaving the resin in the resin tank for a long time.

Preparation:

Prepare a print job using slicing software, such as Uniz Dental, Uniz Desktop or Uniz Maker, depending on the UNIZ printer type. zDental IDB can be printed in layer thickness of 100µm.

For more information, please refer to the Uniz Dental Software Guide (www.uniz.com).

Printing:

Turn on the printer and ensure it works well. Check and clean build platform, resin tank, LCD printing screen. Put the resin tank filled with mixed resin onto the LCD printing screen, and fix the tank well onto the screen. Upload the slicing file into printer through USB or WIFI, then start printing.

For more information, refer to the printer instructions (www.uniz.com).

Post-processing:

Detaching printed parts:

Once the printing process has ended, a dripping time of resin approximately 10 min is recommended, using a soft spatula to remove the resin residue on the build platform into resin tank. Then, carefully detach the printed objects from the build platform.

Washing:

Wash parts in IPA bath with at least 98% purity. Best results are achieved when using a pre and post wash. UWash ultrasonic cleaner is recommended for washing parts.

- Pre-wash bath: 2 minutes. After using, if the IPA density increases 5%, alternate clean IPA for this pre-washing step.

- Post-wash bath: 2 minutes, always use clean IPA for each post-washing step.

If necessary, a dedicated soft brush can be used to help for removing residual resin.

Drying:

Use compressed air to dry parts. If residual resin remains, repeat the “washing-drying” steps.

www.uniz.com

Ensure parts to dry thoroughly before post-curing.

Post-Curing:

Post-curing is an UV-LED light treatment to ensure that printed parts obtain optimal polymer conversion, decreasing the residual monomer of printed parts to a minimum and obtaining the required mechanical properties and surface properties.

UCure, a post-cured device from UNIZ, is recommended to cure parts. Both the two sides of the printed parts are needed to be post-cured.

- One side: 5 minutes, level 3, UCure
- The Other side: 5 minutes, level 3, UCure

If printed part has supports, cure the non-supported side of printed part at first, then remove supports by same tools, finally cure the supported side. Before using, the support stub needs to be grinded and polished smoothly and be cleaned thoroughly.

Storage:

Stored in dark place where avoid direct sunlight or any kind of UV light, environment temperature is recommended around 15 to 28°C, and environment humidity is less than 45%RH.

Do not use resin which exceeds the expiry date.

Disposal:

Dispose liquid resin waste in accordance with local regulations.