poli3Dent CAST

PoliDent

EN Instructions for use **poli3Dent CAST**

1. DEVICE DESCRIPTION:
Light-curing resin based on (meth)acrylate for additive manufacturing of dental models. Compatible with Asiga MAX UV 385.

2. AREA OF APPLICATION:
Used for production of burn-out objects for casting and pressing processes, such as:
- Crowns;
- Veneers;
- Bridges up to XX pontics.

3. SAFETY INFORMATION:
For professional use only, use in well-ventilated areas.
Not for intraoral use.
Refer to the relevant Safety Data Sheet (SDS) before use.
Always wear personal protective equipment (e.g. protective gloves, goggles, etc.).
Follow the 3D printer manufacturer's manual during handling and printing.

4. CONTRAINDICATIONS:
The product contains acrylates and phosphine oxides, which may cause allergic reactions in sensitive individuals.

5. PREPARATION BEFORE USE
- verified 3D printing system (3D printer, washing, and post-curing unit);
- appropriate CAD software;
- Poli3Dent Cast resin;
- flexible spatula, tweezers and sharp flat tool for printed object removal and processing
- cleaning solution:
*recommended Poli3Dent Cleaner concentrate for water-based ultrasonic cleaning. See our website: VSTAVITI PODATKE KO BO NOVA SPLETNA STRAN
*alternatives: ethanol ≥95 % or IPA ≥91 %
- allow the resin to reach room temperature before use
- do not mix with other products

6. DESIGNING, NESTING AND PREPARING FOR PRINTING
Convert intraoral/dental scans to STL format using dental CAD software.
Optimize burn-out object for printing:
- minimum wall thickness: 2,5 mm
- refer to the nesting/slicing software IFU for specific instructions

7. 3D PRINTING
Follow the instructions in the operating manual of your 3D printer.
- Shake resin bottle for about 3 minutes to ensure uniformity
- Pour resin into the printer tank and wait for a few minutes for air bubbles to dissipate
- Ensure the print platform is clean, dry, and securely installed
- Select the pre-installed print settings for Poli3Dent Cast resin, define layer thickness and initiate printing. The bottom layers require longer exposure times. Our general recommendation is that their exposure time should be 4 - 5 times longer than normal layers.
- Monitor the print for potential issues

8. CLEANING
Remove the printed object with a spatula and proceed to wash it within 8 hours after printing. Cleaning steps:
- use recommended water-based solution with Poli3Dent Cleaner or ethanol/IPA in an ultrasonic bath for about 5 minutes (prolonged exposure to solvents may reduce the quality of the print)

9. POST-CURING AND FINAL PROCESSING
Remove support structures before or after curing using side cutters
Use Otoflash H171 curing unit (2 x 500 flashes)
Allow it to cool completely before handling
Uncured parts should be stored away from light, at room temperature
If needed, smooth support contact points. Fully cured models may be cleaned using steam, running water with soap, or soft toothbrush. Do not leave resin sitting in the printer tank.

10. STORAGE
Store resin tightly sealed, in a cool, dry place.
Keep away from UV sources at all stages.
Storage temperature: 10 – 30 °C
Processing temperature: 22 – 28 °C

11. ORDERING INFORMATION
Catalogue No.: P3DC-PB1
Filling quantity: 1 kg
Colou: blue
Supplied in light-proof, sealed bottles

12. DISPOSAL
Fully cured resin can be disposed of as domestic waste. Dispose of uncured resin, ethanol/IPA, and contaminated cleaning liquids according to local environmental regulations.

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