



# Instructions for Use - Resinify BasePro™

Biocompatible Light-Curable Resin for Denture Bases

#### 1. Introduction

Resinify BasePro™ is a next-generation light-curable resin designed for the additive manufacturing of full denture bases. Optimized for use on validated DLP and LCD 3D printers, BasePro delivers strength, esthetics, and reliability for professional dental applications.

Resinify BasePro™, Denture bases produced with this material must be fabricated in dental laboratories or clinics by trained professionals and approved by licensed dentists prior to patient delivery.

BasePro dentures are custom-made for individual patients and intended for daytime use. The recommended wall thickness ranges from 3 mm (minimum) to 10 mm (maximum).

#### 2. Indication

Resinify BasePro™ is indicated for the 3D printing of removable full denture bases. It is intended as a digital alternative to traditional heat-cured and auto-polymerizing denture base resins.

Fabrication requires a CAD/CAM workflow including: digital denture base STL design, DLP/LCD printer (385–405 nm validated systems), and proper post-curing equipment.

#### 3. Available Shades

Light Pink, Medium Pink, Dark Pink, Dark Meharry – designed to replicate natural gingiva tones.

#### 4. Contraindications

Do not use BasePro in patients with known allergies to (meth)acrylate materials. Potential adverse reactions may include skin or mucosal irritation, redness, rash, swelling, eye irritation, tearing, or gastrointestinal discomfort.

### 5. Composition

Acrylates and methacrylates, urethane acrylate oligomers, methacrylated monomers, photoinitiators, pigments and stabilizers.



## 6. Warnings

- Review SDS prior to use.
- For professional use only.
- Use PPE: gloves, goggles, protective clothing.
- Avoid skin/eye contact. In case of contact, wash with water and seek medical advice if irritation persists.
- Do not sterilize printed parts (only disinfect).
- Protect resin and uncured prints from light.

## 7. Storage & Re-Use

- Store BasePro between 10-30 °C in its original, sealed bottle.
- Protect from light exposure.
- Shake before use; homogenize if stored long-term.
- Material remaining in the vat/tray can be reused if filtered and stored properly.
- Always observe the expiration date on the label.

# 8. Manufacturing Instructions

#### A. Supplies Needed

- Validated 3D printer (Resinify-approved DLP/LCD systems)
- Resinify BasePro™
- Resinify Smile<sup>™</sup> or PMMA denture teeth (for assembly)
- Isopropyl alcohol (>96%)
- Post-curing unit: Otoflash G171, Wicked CUREbox Plus, or Dreve PCU LED N2
- Standard dental polishing tools

#### B. Design

- Wall thickness: 3-10 mm
- Use connector designs for lower dentures to improve stability

### C. Printing

- Orient denture bases vertically
- Supports should attach only to non-mucosal areas
- Mix resin in tray gently before printing

#### D. Cleaning

- Wash parts in >96% IPA:
- \* 1st wash  $\leq 5 \min \rightarrow air dry$
- \* 2nd wash  $\leq$ 2 min  $\rightarrow$  air dry
- Ensure parts are fully dry before curing

### E. Assembly

- Bond uncured BasePro denture bases to:
- \* Printed Resinify Smile™ teeth (uncured, unpolished)



\* Conventional PMMA teeth (prepared with sandblasting + bonding agent)

#### F. Post-Curing

- Otoflash: 2×3000 flashes under nitrogen
- CUREbox Plus: 2×25 min @ 50 °C
- Dreve PCU LED N<sub>2</sub>: 18 min, 90% power, vacuum

### G. Finishing

- Remove connectors, polish with standard dental equipment
- Optional secondary post-cure: Otoflash 1000 flashes or CUREbox 5 min @ 30 °C

### 9. Disinfection

Validated disinfectants: 70% Ethanol, Green&Clean AD, MD 520, PrintoSept-ID, Dentavon. Do not sterilize printed parts.

## **10. Patient Cleaning Instructions**

Patients should clean dentures with a soft toothbrush and toothpaste under running water. Avoid abrasive/whitening pastes. Do not soak in water or cleaning solutions. Dry thoroughly after cleaning.

#### 11. Manufacturer

Resinify Technology LLC, Detroit, Michigan, USA | info@resinifytechnology.com | www.ResinifyTechnology.com

## **Quick-Start IFU (One-Page Workflow)**

- 1. 1. Design  $\rightarrow$  STL from scan (3–10 mm wall), connector for stability.
- 2. 2. Prepare  $\rightarrow$  Shake bottle (5 min), rest (5 min), mix gently in vat.
- 3. 3. Print  $\rightarrow$  Orient vertical, supports on non-mucosal surfaces.
- 4. 4. Wash → IPA > 96%. Wash1 ≤ 5 min → dry. Wash2 ≤ 2 min → dry.
- 5. S. Assemble → Bond uncured base to Resinify Smile<sup>™</sup> or PMMA teeth.
- 6. 6. Post-Cure → Otoflash 2×3000 flashes / CUREbox 2×25 min @ 50 °C / Dreve PCU 18 min vacuum.
- 7. Finish  $\rightarrow$  Remove connectors, polish, optional final cure.
- 8. 8. Deliver  $\rightarrow$  Inspect, disinfect, do not sterilize.
- 9. 9. Patient Care → Brush with soft toothbrush + toothpaste, no soaking.