



Lucitone Digital Print Denture Resin Handling Instructions



- ✓ Always immediately cap the bottle after pouring the resin – ensure cap is tight.
- ✓ Immediately close the printer door after pouring resin.
- ✓ Do not leave the resin in the cassette/vat for an extended period of time.
- ✓ Minimize the exposure to ambient light with the resin in the cassette/vat.
- ✓ Immediately pour resin back into the bottle after the print job is complete – refer to the Recycle instructions in the Illustrated Technique Guide (ITG) or Instructions for Use.
- ✓ Do not expose resin to excessive light or heat (always store the resin between 60°F/16°C and 80°F/27°C).

IMPORTANT: Not following the handling instructions can impact the lifespan of the material.

Printer	Material	Recycle Timeframe
Carbon® M-Series	Lucitone Digital Print 3D Denture Base	Up to 5 months
	Lucitone Digital Value 3D Economy Tooth & Trial Placement	
	Lucitone Digital IPN 3D Premium Tooth	
Asiga MAX™ UV & PRO 4K™	Lucitone Digital Print 3D Denture Base	Up to 3 months
	Lucitone Digital Value 3D Economy Tooth & Trial Placement	
	Lucitone Digital IPN 3D Premium Tooth	



Denture Whitening / Discoloration Troubleshooting

Cleaning	
Use $\geq 99\%$ Isopropyl Alcohol (IPA) for first and second wash	The use of lesser concentrations of IPA can result in improper cleaning of excess resin, and result in whitening/discolorations.
Confirm only Lucitone Digital Print (LDP) is being washed in each container	<ol style="list-style-type: none"> 1. Washing multiple materials (ex: model resin and LDP) in the same container could result in cross contamination and whitening/discoloration 2. Do not wash Lucitone Digital IPN denture teeth in IPA that was used to clean Lucitone Digital Print 3D Denture Base.
Follow cleaning instructions for the ultrasonic cleaner. As instructed in the IFU, always perform both the first and second wash cycles	<p>Using an ultrasonic bath, wash for 2 minutes (first cycle), followed by 1 minute (second cycle). The container should be closed when placed in the ultrasonic bath. Wash each denture individually. Ensure all excess resin (appears white) is brushed away using a brush soaked in clean $\geq 99\%$ IPA in between the first and second wash.</p> <p>Use fresh IPA for the second ultrasonic wash. Note: Prolonged exposure to IPA could cause changes in the physical properties and discoloration. When using a brush to wipe away remaining resin, always use a brush soaked in clean $\geq 99\%$ IPA.</p>
Do not use a steam cleaner on a Lucitone Digital Print Denture	<p>The use of a steam cleaner can cause whitening/discoloration of the finished and polished denture. Dentsply Sirona recommends the use of an ultrasonic cleaner.</p> <p>Ensure clinician is not using a steam cleaner on the denture.</p>

Fuse/Cure

DS Digital Cure Large Capacity Unit Pre-curing Step

After applying Lucitone Digital Fuse Step 3 Total or Step 3 3D Sealer to printed denture teeth, tack cure the denture teeth prior to final curing in the DS Digital Cure Large Capacity curing unit using the UV Tack-Cure Light. For 1 minute, rotate the arch under the UV-Tack Cure Light ensuring light exposure to all tooth surfaces. The sealer will be slightly sticky/tacky to the touch - avoid excess handling.

Follow curing unit cool-down procedures

It is important to leave the denture(s) in the curing unit for the entire cool-down timeframe. Removing prematurely could result in the denture(s) not being fully cured which can lead to whitening/discoloration.

- inLab Speedcure Processing Unit: 3-minute cool down for both cure cycles
- DS Digital Cure Large Capacity Unit: wait until the temperature indicator reaches 50°C before removing the denture.

Follow validated tack curing and curing procedures for the Lucitone Digital Print Denture System

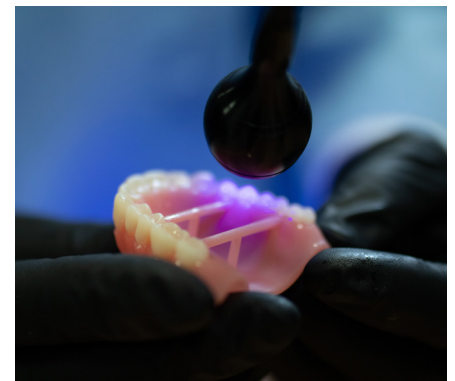
Inadequate tack curing or final curing can cause an air inhibition layer to be formed, which can lead to whitening.

Validated curing units are the DS Large Capacity Curing Unit and the inLab Speedcure unit.

Confirm correct use of Lucitone Digital Fuse Steps 1, 2 & 3 Total for the bonding process

When using Lucitone Digital Fuse Step 1 3D Tooth Conditioning Agent with DS Multilayer PMMA denture teeth or IPN 3D Digital Denture Teeth, allow the teeth to air dry for 2 minutes (do not wipe dry). When using Lucitone Digital Fuse Step 2 3D Denture Bonding Resin, ensure that each tooth is tack cured for 10 seconds. Ensure that Lucitone Digital Fuse Step 3 Total is applied to the cervical areas of all carded teeth or milled teeth (avoid thick application or puddling). Ensure that Lucitone Digital Fuse Step 3 Total is applied to the entire surface of printed teeth (avoid thick application or puddling).

Ensure that all excess Lucitone Digital Fuse Step 2 material is removed before tack curing and final curing.



Lucitone Digital IPN™ 3D Premium Tooth Flowability Conditioning Procedure



The following procedures can be used if the Lucitone Digital IPN materials exhibits thickening that prevents flowability from the bottle or if crystallization/clumping is visible.

CAUTION:

- Open cap slowly as contents may be under pressure.
 - Hot resin can damage printers. Refer to your printer's operations manual for acceptable resin temperatures.
 - Care must be taken to avoid introducing air bubbles into resin. If air bubbles are entrapped in the resin, additional waiting time is needed before use.
 - The Lucitone Digital IPN product label could detach from the bottle during heating. Reattach the label to maintain medical device traceability.
 - Resin conditioning can be repeated up to 3 times per bottle.
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Hot Water Procedure - Recommended

1. Boil water.
2. Carefully place bottle with cap tightly closed into water.
Caution: Ensure water does not enter the bottle.
3. Heat for 20 minutes.
Caution: Overheating could damage the resin.
4. Remove from water using heat resistant gloves. Gently shake for 15 seconds.
5. Allow resin to set for 30 minutes, then gently shake for 30 seconds to ensure a homogeneous and smooth resin mixture.
6. Allow resin to cool for 1 hour.

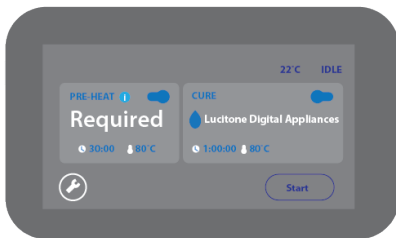
Alternative Flowability Conditioning Procedures

DS Digital Cure - Large Capacity

1. Place bottle with tightly sealed cap into a DS Digital Cure (Large Capacity) unit.
2. Heat for 90 minutes at 80C with preheat cycle only.
To manually set the curing time and temperature:



2.1 Select **Cure**. The **Resin Profile** menu appears.



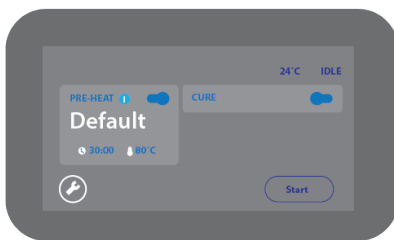
2.2 Select **Lucitone Digital Appliance** on the screen.



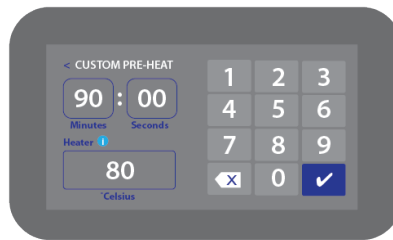
2.3 Select **Custom**. The **Custom Cure** screen appears.



2.4 Input time (1 minutes) and temperature should be 80°C on the touch screen. Select the check mark to confirm your selection.



2.5 Turn off Cure by swipe blue dot to left.



2.6 Touch preheat to get this screen, input time 90 minutes, then select blue checkmark.

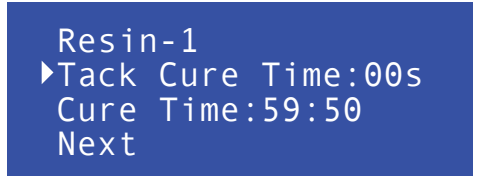
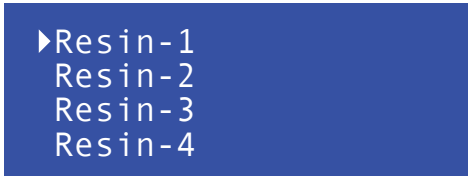


2.7 Select **Start**.

3. Remove bottle from unit using heat resistant gloves. Gently shake for 15 seconds.
4. Allow resin to set for 30 minutes, then gently shake for 30 seconds to ensure a homogeneous and smooth resin mixture.
5. Allow resin to cool for 1 hour.

DS Digital Cure Unit Procedure

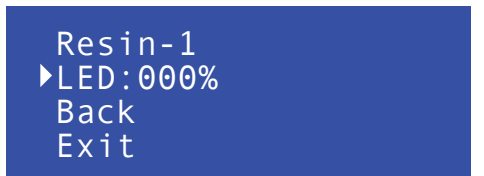
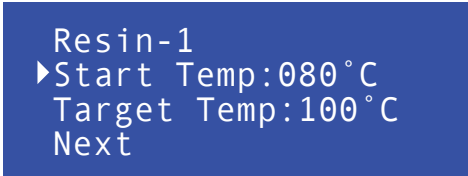
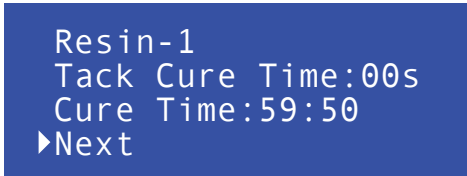
1. Remove turntable and place bottle with tightly sealed cap into a DS Digital Cure unit.
 - **Caution: To fit in the curing unit the bottle must be laid on its side. Ensure the cap is tightly attached to prevent leaking.**
 - Wipe clean around cap areas to prevent dripping in the curing unit.
2. Program a custom cycle for heating the resin:



- 2.1 From the resin profile screen, select **Custom Cycles**. The Custom Material Profile screen appears.
- The unit comes with 11 empty slots which are shown as Resin-1, Resin-2 and Resin-3.
 - The system will automatically save inputs in each cycle until overwritten.

- 2.2 **Select Resin-1**. The Resin profile's **Custom Settings** appears. Custom settings appear on 3 screens. Scrolling through each page using the following:
- "Back" goes to previous Resin-1 Settings page.
 - "Next" goes to the next Resin-1 Settings page.
 - "Exit" goes to main menu.

- 2.3 Set **Tack Cure** time to **0:00**.



- 2.4 Set **Cure Time** to **59 min 50 sec**, select **Next** to set the temperature.

- 2.5 Set **Start Temperature** to **80°C**.

- 2.6 Set **Target Temperature** to **100°C**, select **Next**.

- 2.7 Using Rotary Knob turn LED light intensity to 000%.

3. **Start the Recovery Cycle** by pressing the Start/Stop button.
4. Remove from unit using heat resistant gloves. Gently shake for 15 seconds.
5. Allow resin to set for 30 minutes, then gently shake for 30 seconds to ensure a homogeneous and smooth resin mixture.
6. Allow resin to cool for 1 hour.