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DENTAL 3D PRINTING GUIDE

3 Post-Processing Tips for Ceramic-Filled Resin Prints



A practical guide to achieving cleaner, smoother, and more consistent results with dental 3D printing.





INTRODUCTION

Ceramic-filled resins can produce highly detailed, esthetic dental restorations. But even a well-designed, successfully printed restoration can end up with a **chalky surface, leftover resin, or damaged details** if it isn't post-processed correctly.

Here are three tips to help you get better results from your next ceramic-filled resin print.

TIP #1

Choose the Right Cleaning Method

Avoid chalky, hazy, or dusty surfaces.

IPA (isopropyl alcohol) is commonly used to clean dental 3D prints, but not every ceramic-filled resin responds to it the same way.

Some ceramic-filled resins are sensitive to prolonged IPA exposure, which can leave the surface looking **chalky, cloudy, or frosted**.



What you should do

- Check the resin manufacturer's recommended cleaning solution and washing time.
- When approved, use a soft brush with the recommended cleaning solution to gently remove excess resin.
- Use clean, oil-free compressed air, where recommended, to help remove residual liquid from detailed areas.

> **PRO TIP**
> More washing doesn't always mean a cleaner print. Following the correct cleaning time is just as important as choosing the right solution.

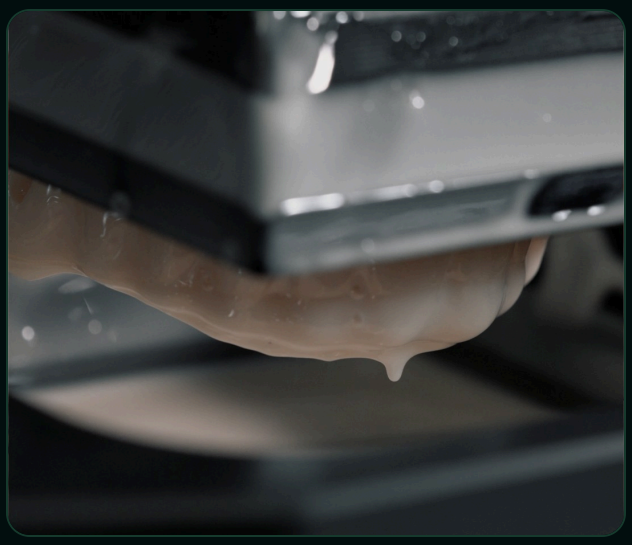
TIP #2

Remove Excess Resin Before Washing

Prevent unwanted residue and preserve fine details.

Freshly printed restorations often have excess uncured resin sitting on their surfaces, particularly around **grooves, margins, and other intricate areas**.

Taking a little extra care before washing can reduce resin carryover into your cleaning solution and help produce more consistent results.





What you should do

- Allow excess resin to drip off before washing, if recommended for your material.
- Use clean, oil-free compressed air to remove excess resin where permitted by the manufacturer's instructions.
- Follow the specified washing procedure to remove any remaining uncured resin.
- Make sure the print is completely clean and dry before post-curing.

> **PRO TIP**
> Inspect the margins, occlusal anatomy, and other detailed areas before curing. Any uncured resin left behind can affect the final surface finish.

TIP #3

Be Gentle When Cleaning Delicate Areas

Protect thin walls, screw-access channels, and esthetic contours.

Ceramic-filled resin prints can have intricate features that require extra care during cleaning.

Aggressive brushing or excessive pressure can damage delicate areas, **particularly before the restoration has completed post-curing**.



What you should do

- Use a soft-bristle brush or microbrush for hard-to-reach areas.
- Apply light, controlled pressure when removing residue.
- Pay special attention to margins, thin walls, and detailed anatomical features.
- If resin remains, repeat the approved cleaning process rather than scrubbing harder.

PRO TIP

Let the cleaning solution and the right tools do the work. You shouldn't need aggressive scrubbing to achieve a clean surface.

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BEFORE YOU CURE

Quick Checklist Before Post-Curing

Before moving your ceramic-filled resin print to the curing stage, make sure:

- [ ] You're using the manufacturer-approved cleaning solution.
- [ ] You've followed the recommended washing time.
- [ ] Excess uncured resin has been removed.
- [ ] Delicate features and margins are clean and intact.
- [ ] The restoration is completely dry.

Always follow the resin manufacturer's Instructions for Use (IFU) for cleaning, drying, post-curing, and finishing. Different ceramic-filled resins may require different procedures.

A consistent post-processing routine helps you protect print quality, preserve fine details, and reduce avoidable rework.

Pair Great Post-Processing With Fast CAD Design Support

A good final restoration starts with a well-designed file.

Whether you're printing chairside or working through a busy case schedule, our EviSmart CAD team can support your digital dentistry workflow with fast-turnaround designs built around your preferences.

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