



## Lakeside Pottery Ceramic, Restoration, and Kintsugi Studio

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# Achieving Professional Results with Cold Glaze

Using cold glaze effectively involves preparation, attention to detail, and understanding key variables. Here's a comprehensive guide to help you achieve a flawless and durable finish.

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## 1. Preparation

### Surface Preparation

- Ensure the object's surface is perfectly smooth, as any imperfections will show through the glaze.
- Sand between layers with Micromesh sandpaper (grit 2400 or 3200) to refine the surface and enhance adhesion.

### Workspace Setup

- Work in a clean, dust-free environment.
- Maintain consistent temperature and humidity, as environmental changes can affect the glaze's performance.

### Paint Curing (If Applicable)

- When glazing over paint (e.g., Acrylic), ensure the paint is fully cured to avoid unwanted interactions, such as yellow shades becoming more intense.
  - We primarily use acrylic paints and cure them in a 140°F (60°C) oven for 24 hours, reducing the time compared to air drying, which can take days.
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## 2. Choosing the Right Glaze

### Epoxy-Based Cold Glaze

- Epoxy-based cold glazes like Sylmasta are extremely durable and highly resistant to scratches and stains.
- **UV Sensitivity:** Epoxy glazes are more prone to UV degradation, and could lead to yellowing over time if placed in with direct UV exposure.

### Non-Epoxy Cold Glaze Options

- Alternatives like **Polyurethane Resin** or **Shellac** are less affected by UV light, maintaining color stability. However:
  - They are softer and less resistant to scratches and stains.
- Choose the glaze type based on the durability and UV exposure requirements of your project.

### Water-Based Glazes

- Water-based cold glazes may work for less demanding applications but have limited durability.
    - The finish is softer and more prone to scratches, stains, and damage from cleaning materials.
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### 3. Mixing and Thinning

- Proper thinning is crucial:
    - **Too thin:** Results in dripping and uneven coverage.
    - **Too thick:** Causes an "orange peel" texture.
  - Use only manufacturer-approved thinners for consistent results and chemical stability. Mix thoroughly but avoid over-mixing to prevent air bubbles.
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### 4. Application Equipment

#### Airbrush Quality

Use high-quality airbrush equipment for precise application. We rely on **Paasche airbrushes**, known for their reliability and control although Iwata or Badger are good brands as well.

- Regularly clean and maintain the airbrush to avoid clogs or inconsistent spraying.

#### Needle and Aperture

- Match the airbrush needle size and aperture to the glaze viscosity. Thicker glazes may require larger apertures.
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### 5. Airbrush Pressure

- Proper airbrush pressure is essential:
    - **Too high:** May cause "spiderwebs" (fine threads of glaze spraying outward) or disturb the glaze, preventing it from settling smoothly.
    - **Too low:** Can result in inconsistent flow and uneven application.
  - Test pressure settings on scrap material before glazing the final piece.
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### 6. Application Technique

- **Distance:** Maintain a consistent distance of 6–8 inches from the surface, adjusting as needed based on the glaze and airbrush settings.
  - **Hand Motion:**
    - Use steady, even strokes and taper off smoothly at the end of each pass to avoid buildup.
  - **Layering:**
    - Apply multiple thin layers, allowing each to dry fully before adding the next.
    - Applying a new layer before the previous one cures can cause a wrinkled "crepe paper" texture.
  - **Final Layer:** Dilute the glaze slightly more for a mirror-like finish, but be cautious of dripping due to the thinner consistency.
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### 7. Object Orientation and Support

- Position the object to minimize drips and allow for even coverage. Rotate it as needed during application.
  - Use stable stands or supports to secure the object throughout the process.
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### 8. Drying and Curing

- Allow each layer to cure completely before applying the next to avoid texture issues or damage.
- Place the glazed object in a stable, draft-free environment for curing. Avoid direct sunlight, which can cause uneven drying and accelerate UV degradation in epoxy glazes.

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## 9. Cleaning and Maintenance

- **Tools:** Clean the airbrush and related tools thoroughly after each use to prevent glaze buildup.
- **Workspace:** Regularly clean the workspace to prevent dust or particle contamination.

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## 10. Additional Considerations

### Environmental Factors

- **Humidity:** High humidity can result in a cloudy finish, while excessive heat may cause the glaze to dry too quickly and crack.
- **UV Exposure:** For epoxy glazes, consider a UV-protective coating to reduce yellowing in pieces exposed to sunlight.

### Safety Measures

- Wear protective gear, including gloves and a mask, as solvent-based glazes emit fumes.
- Ensure proper ventilation in your workspace.

### Substrate Compatibility

- Some materials may require a primer or sealer before applying the glaze to ensure proper adhesion.



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