



## Useful Information



### A viscosity cup measures the consistency of glaze or liquid.

It is like a ladle and includes a plastic cup or scoop with a single hole. The hole allows the glaze to flow out. The cup has a handle so that it can be dipped in the glaze.

Simply fill the cup with glaze and time how long it takes for the liquid to dispense through the hole.

Our Ultra Clear and Dazzling Clear Glaze Hobby Colorobbia glaze will take about 19 seconds to dispense from full to empty.

## Determining The Viscosity Of Glaze

Experience is the best guide to determine the consistency of glaze but unfortunately experience takes a while to develop. A viscosity cup will give added confidence to the novice glazer.

A viscosity cup is a device used to compare or measure the density of liquid. Glaze will usually arrive at “nearly” the recommended consistency. Concentrated or powdered glazes need to be mixed by following the manufacturer’s guidelines or recommendations. However, some glaze containers have no instructions on the labels.

Remember water is the thinnest ingredient in glaze. If there are lots of items to dip glaze or if the glaze itself is stored in a warm environment, then the water will evaporate leaving a thicker consistency of glaze. This evaporation often makes it difficult to calculate whether glaze is too thick - the effects of thickened glaze are only noticeable after an item is fired (and by then it is too late and a piece could get ruined).

### Viscosity Cup Guide

You will need a stopwatch or a watch with a second hand.

1. Please ensure that the liquid glaze is at room temperature (timings can sometimes be affected if the liquid is too hot or too cold). We also recommend sieving the glaze to remove any lumps that may cause a blockage and distort the timings.
2. Thoroughly mix the glaze using a drill or hand mixer (we use a toilet brush to mix our glaze). Ensure that:
  - a. There are no particles at the bottom of the glaze vessel
  - b. The glaze liquid is in suspension.
3. Make sure the viscosity cup and mixing appliances are washed thoroughly before and after use.

4. It is advisable to use a cocktail stick each time to clear the hole at the bottom of the viscosity cup. This is because dried glaze in the hole can be difficult to see and any blockage (no matter how minor) will distort the timing.
5. Submerge and completely fill the cup. Lift the cup out of the liquid and record how long it takes for the glaze to flow out of the hole (from full to empty). Repeat this exercise a couple of times.
6. Alternatively, fill the cup to the brim while holding a finger over the hole. Start your stopwatch when you remove your finger from the hole.
7. The number of seconds is a reliable measure of the viscosity of the glaze. We recommend 19-24 seconds for the clear glazes that we stock (i.e. Hobby Colorobbia and Duncan Ceramics). If the liquid runs through faster, then the glaze is too thin. If the liquid runs through slower i.e. >24 then add a small teacup of water to thin the glaze. Repeat steps 5 or 6 above (and add more water if required) until you are happy with the timings. NB: Do not seek perfection with the timings as they could change each time by the odd second or two.

We offer a monthly glazing training course for £50+ VAT per person (or FREE if you buy a kiln from us).

#### Notice

Please note the advice and recommendations given in this document are provided as an aid to novice glazers and firers. The notes given are not step-by-step instructions but are provided as “general” suggestions following years of glazing and firing experience. Country Love Crafts will not be held liable for any sub-standard results as a consequence of the guidelines given. However, please do contact us for advice if the desired results are not achieved.