Using Georgies Raku Glazes

G eorgies’ unique raku glazes come ready to use. Brush, dip, pour, overlap or mix them for dramatic effects – and remember that you can use the black color of the smoked clay body as an element in your design work, too. If you are using raku glazes for the first time, you will quickly find that there’s more variation in their consistency than you may have seen with other ceramic glazes. This is due to the differences in their formulas: they don’t all use the same pigments. Always thoroughly mix raku glazes before use.

Bisque & Dryfooting

Cone 04 is the “standard” bisque firing temperature for most ceramic work. Some raku artists find that they have better firing results with bisque fired to cone 06 or cone 08 (lower temperatures than cone 04), especially with smooth-textured lowfire clay bodies. The lower firing temperatures leave the clay less vitrified, more “flexible,” and better able to withstand the thermal shock inherent to the firing process.

Bisque that has been recently fired is ready for glazing. If your bisque has been collecting dust for a while, you may need to wipe it down with a barely damp sponge.

Dryfooting, or leaving the bottom of the piece unglazed (where it sits on the kiln shelf) is not as important in raku as in regular firing. Your pieces will not stay on the kiln shelf long enough for the glaze drips to “glue” them into place as they cool.

Dryfooting is still important, however, to avoid glaze spots or puddles on the kiln shelf. These spots may contaminate the next piece(s) that go into your kiln.

Glaze Application

The desired consistency for raku glazes is roughly the same as milk, or a little thicker (like chocolate milk). If your glaze is too thick, thin it with water and stir thoroughly. If the glaze is too thin and watery, you may need to brush on more coats to reach the best application thickness. Application thickness is important because raku glazes are sensitive to thickness: too much or too little will change your color and texture results.

Optimum application thickness equals roughly half the thickness of a dime. It’s more important to reach this thickness than to count the precise number of coats applied. Matte glazes often reach this thickness with only two brushed flowing coats. They work best when applied thinner than gloss glazes. Gloss glazes usually need three brushed flowing coats to reach this thickness.

You may find that you prefer thicker or thinner glazes, and glaze applications, for your individual styles or techniques.

Specific Glaze Tips

- PG801 Apple Crackle may be thick in the jar, and will not flow very well in brushing (even after you mix it). This is normal due to its formula. Apply in one brushed coat.
- PG806 Midnight Luster tends to be thin in the jar. Apply more coats, or leave the jar open to allow some water to evaporate. (Keep an eye on how much!)
- PG809 Alligator and PG812 Copper Ridge, brush an extra coat or two compared to your normal application of the matte glazes.
- Do not over-apply PG810 Piepenburg Red-Bronze. This glaze is known for moving and running as it melts during firing. Too heavy an application can make a real mess.
- One coat of PG805 White Crackle yields a flat white surface with large, dramatic cracks. For more visual depth and better crackle, apply two heavy or three medium coats. You’ll also get better crackle on textured clays which use sand or grog in their formulas.

Firing & Reduction

The sample pieces on Georgies’ website were fired in propane-fueled kilns made from 20-gallon aluminum trashcans. We fire the pieces to glaze maturity at roughly cone 06.

We don’t use pyrometers or witness cones in our firing, but monitor the kiln’s progress by watching how the glazes change and melt. Most gloss glazes bubble up (or “flux”) as they melt, then smooth back down into coats of liquid glass. When the pieces look glossy and wet in the kiln, we know they are ready for reduction.

Matte raku glazes do NOT visibly flux in the same way as the gloss glazes, but they do mature at the same firing temperature. When firing pieces with matte glazes, also fire a piece with gloss glazes so you can use the gloss glazes as a timer.

Our sample pieces were reduced in 20-gallon aluminum trashcans filled 1/3rd to 1/2 way with newspaper or office paper torn into half-inch strips, PLUS a double handful of dried leaves from local trees.

After the initial burst of flame when the hot pieces contacted the combustibles, we put the lids on the reduction cans and allowed our pieces to cool for 30 to 40 minutes.

Over a period of years, raku pieces may lose their metallic lusters as the glaze pigments recombine with oxygen in the air. You can slow or prevent this process on gloss glazes by keeping them away from direct sunlight and applying a sealer like Duncan’s SS331 Clear Gloss. Applying sealers to matte glazes, however, WILL RUIN their color effects.

Many variables affect the color results of raku glazes: clay color, glaze application, firing & reduction conditions, weather & barometric pressure, etc. Color variations are normal and to be expected. The most important question is if YOU like the color results you achieved, whether or not they match our samples.

Raku glazes are never foodsafe due to their high concentrations of metallic oxides, and they are NOT watertight.