

USING GEORGIES RAKU GLAZES

Georgies' 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 your raku glazes before using.

Bisque & Dryfooting

Cone 04 is the "standard" bisque firing temperature for most ceramic work. **Some raku artists find that they have better results with bisque fired to cone 06 or cone 08** (lower temperatures than cone 04), especially with the 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 this 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 the 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; which usually need three brushed, flowing coats to reach this thickness.

You may find that you prefer thicker or thinner glazes, and varied 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.
- To get the best textural effects from **PG809 Alligator**, brush an extra coat or two compared to your normal application of the matte glazes.
- Do not over-apply **PG810 Piepenberg 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 trash cans. We fire the pieces to glaze maturity at roughly cone 06 (1830°F).

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 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 a gloss glaze so you can use the gloss as a timer.

Our sample pieces were reduced in our 20-gallon aluminum trash cans filled 1/3 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 allow our pieces to cool for 30-40 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 clear sealer on the piece when cool. Applying sealers on matte glazes, however, **WILL RUIN** their color effects.

Many variables will 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 that you achieved, whether or not they match our samples.

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

Georgies
CERAMIC AND CLAY CO.

Raku Glazes

Cone 06



PG801
Apple Crackle



PG803
Copper Penny



PG805
White Crackle



PG808
Beetle Juice



PG809
Alligator



PG811
Blue Dolphin



PG823
Purple Passion



PG824
Firedance

Item	Name	4oz	Pint	Gallon
PG801	Apple Crackle	\$9.00	\$21.00	\$115.50
PG803	Copper Penny	\$9.00	\$21.00	\$104.00
PG805	White Crackle	\$9.00	\$21.00	\$104.00
PG808	Beetle Juice	\$9.00	\$21.00	\$104.00
PG809	Alligator	\$9.00	\$21.00	\$104.00
PG811	Blue Dolphin	\$9.00	\$21.00	\$115.50
PG823	Purple Passion	\$9.00	\$21.00	\$115.50
PG824	Firedance	\$9.00	\$21.00	\$115.50

PG899Raku Glaze Sample Set..... **\$43.20**

Retail value of \$72.00 (4oz each of 8 colors)

Our samples were bisque fired to ^04 on Georgies' G-Mix 6 clay. Your choice of clay can make a difference in your fired results.

PG801 • Apple Crackle

A gloss glaze that turns brilliant turquoise with fine white lines of crackle and occasional copper flashes. Also offers highlights of green and yellow. Tends to be thick in the jar and doesn't brush out well: pat on one good coat with your brush and call it good.

PG803 • Copper Penny

This vibrant gloss glaze is one of the most reliable flashing glazes you'll find anywhere. Results depend on reduction conditions, featuring iridescent blue/purple highlights across a wide spectrum of possible colors: we've seen bright metallic copper, metallic gold, and rich dark green.

PG805 • White Crackle

A reliable gloss white crackle that performs over and over again. Apply one to three flowing coats with a soft brush. A single coat gives a flat, almost matte white with very little crackle. Gloss coverage and the amount of crackle increase with each additional coat. Over-application may lead to glaze runs! Works best for the most pronounced crackle effects on sandy or grog-bearing clays. After firing, wipe on India Ink or oil-based stains, then wipe off again with a soft cloth. Inks or stains will settle into the crackle to accent them and give more visual depth.

PG808 • Beetle Juice

This glaze does all kinds of exciting things! The background color varies from aqua (with lots of oxidation) through yellow to green (with more reduction). Flashy, unpredictable highlights of metallic copper and copper red may appear, overlaid with iridescent highlights like the back of a beetle. Crackles, too!

PG809 • Alligator

Alligator is a very dry patina glaze with textural crackling where it's thicker in application. Colors vary, with dark copper rust predominant but overlaid with flashes of purple velvet, maroon and olive green.

PG811 • Blue Dolphin

One of our favorites, and one of our most popular glazes. A dry, textural patina glaze featuring brilliant copper flashes, deep purples, and flame-like streaks of silver, orange or rose over a deep blue background. The flame-like streaks are likeliest to occur where the glaze is thinner. Blue Dolphin may also show brushstrokes where applied thin. It's a fascinating faux-textural effect.

PG823 • Purple Passion

Hailed by some of our customers as the best raku glaze they've ever used, this one gives a very interesting combined glossy-but-textural surface. Lots of true purple lusters, shading to blue edges, over a gold-to-rose background with the unique sandy-glossy texture that just draws your eye over and over.

PG824 • Firedance

The name for this glaze came in a 'flash' of inspiration, because we often refer to raku as the 'dance of the hot pots'. Firedance gives iridescent luster and copper flash results over a background of metallic green-gold to rose blush.

Raku: It's More Than the Glazes

We'd like to present here a few ideas for raku techniques that we've seen over the years. We came up with some of them, but others were invented by some of our truly creative students in our raku classes.

When it comes to decorative techniques for raku, the first thing to bear in mind is that **raku is a lowfire process**. Georgies' raku glazes formulated to mature (fully melt) at cone 06, or roughly 1830°F. That's the same temperature as most lowfire ceramic products from manufacturers like Duncan and Mayco! This means some of their products adapt readily and easily to use in raku. The unique character of raku glazes and raku firing, however, open up more possibilities than you'll find in an electric kiln.

- Raku glazes are easiest to apply, and work best, when you brush them on at a consistency roughly equal to chocolate milk. You can thin Georgies' raku glazes with water as needed to reach that consistency. It's all about what works best for you; you can leave them thicker or make them thinner if you prefer.
- Use separate brushes to apply White Crackle and colored glazes. A little contamination from one of the colored glazes can go a long way in White Crackle.
- Georgies' patina glazes (like Blue Dolphin) work best when you apply two coats at that consistency of chocolate milk. The gloss glazes (like White Crackle) work best with three coats. The number of coats will vary, however, with the thickness of your glaze. You may need to apply more or less.
- You can mix raku glazes together in various proportions to create more color and texture options. Visit the "How-To Projects" page on www.georgies.com for color examples and information.
- Use Duncan's French Dimensions, which are raised or "puffy" glazes, on raku glazes OR on bare clay where it will smoke to black in post-firing reduction. French Dimensions work best when applied over the patina glazes, so they don't get moved around when the gloss glazes melt.
- You can do underglaze design work on your greenware with your choice of underglaze products. They look great under our White Crackle glaze!
- Experiment with different clay colors under White Crackle. The color of the clay body will dramatically change your results.
- You can also change the color of White Crackle with Duncan EZ-Strokes or Mayco One-Stroke translucent underglazes. (Lighter colors like yellows, pinks or light greens may tend to burn out in the fast raku firing, but darker colors hold up better.)
- Spatter drops and streaks of Blue Dolphin across a background of White Crackle for a blue-&-white "marbled" look with some copper flashes.
- Apply three coats of White Crackle, let it dry, and then scratch or carve out a design through the glaze back down to the bare bisque. Make the lines bold and thick: as White Crackle melts during firing it will "flux," meaning that it bubbles up on your piece as the glaze minerals melt. (All gloss glazes flux to varying degrees, but patina glazes don't.) This fluxing may thin out or fill in some of the lines of the design. Use that to your advantage in some designs, like trees: cut the lines for upper branches thinner, so they'll gradually fill in. It looks great!
- Experiment with various organic combustibles in the post-firing reduction. Leaves, straw, pine needles, hamster bedding (red cedar shavings), and other materials will change the glaze color results, depending on their chemical content.

NEVER BURN PETROLEUM-BASED PRODUCTS OF ANY KIND IN REDUCTION. NEVER BURN PLASTICS, STYROFOAM, OR OTHER MATERIALS CHEMICALLY CREATED OR PROCESSED. Smoke from burning these materials is toxic and highly dangerous.

- Raku pieces are for decorative purposes only.
- Raku glazes are not foodsafe and are not watertight after firing.
- Raku firing must be done in a raku kiln, a fast firing, using fossil fuel (usually propane), and a post-firing reduction procedure.
- Raku is an inherently dangerous process since you are working in close proximity to extreme heat and open flame.
- Take appropriate precautions to reduce the risk of fire or injury.
- We strongly recommend the use of personal protective equipment such as firing gloves, safety or kiln glasses, plus a respirator, when working around raku kilns or reduction chambers.