

Georgia Regents University GLAZE LIST
HOLLINGSWORTH-CERAMICS

LOWFIRE GLAZE RECIPES

Crusty Glaze - BB 1 cone 04

30 gerstley borate
50 kaolin
20 cryolite

100

description: matte, brown, with big, uneven cracks

Crusty Glaze - BB 2 cone 04

40 gerstley borate
10 kaolin
20 cryolite
30 titanium dioxide

100

description: matte, yellowish, with even cracks

Crusty Glaze - BB 3 cone 04

20 gerstley borate
20 kaolin
40 cryolite
20 titanium dioxide

100

description: matte, yellowish, with even cracks

Crusty Glaze - BB 4 cone 04

34 gerstley borate
33 cryolite
33 titanium dioxide

100

description: matte, yellowish, cracks are even but fewer in number

Jackie's Base Glaze cone 04

38 gerstley borate
10 lithium carbonate
5 nepheline syenite
5 EPK
42 silica

100

Add 5% zircopax

A versatile, strong semi-matte glaze. Takes colorants well.

Jackie's Base Glaze Color Tests (use ONE set of these possibilities to make the base glaze a specific color)

1. BLACK

2.2% cobalt oxide

.6% chrome oxide

2.6% iron oxide

.8% manganese dioxide

2. WHITE

25% zircopax

3. PURPLE

12.0% blackberry wine stain

.2% cobalt carbonate

4. CREAM YELLOW

12% rutile

5. GREEN

2.5% chrome oxide

6. TURQUOISE BLUE

3.5% copper carbonate

7. BROWN

12% red iron oxide stain

8. OTHER COLORS

10-20% Mason stain

Pete's Purple Glaze cone 04

40 barium carbonate

19 EPK

19 nepheline syenite

10 silica

5 lithium carbonate

7 copper carbonate

100

add 3% bentonite

Dry matte glaze with intense barium - copper blue color. VERY TOXIC - don't use on pots!

Bettelou's Color Variations on Pete's Purple cone 04

Note: use the Pete's Purple recipe, but omit the 7% copper carbonate.

1. BLUE

.4% cobalt carbonate
12% zircopax

2. ROBIN'S EGG BLUE

2% copper carbonate
3% yellow stain

3. YELLOW (toward green)

2.5% chrome oxide

4. CREAM

12% rutile

5. OTHER COLORS

15-20% Mason stain

Transparent Glaze cone 04

1 silica
2 EPK
3 gerstley borate

6 parts by weight
A sturdy, dependable clear glaze.

Transparent Glaze to fill a bucket

833 flint
1667 EPK
2500 Gerstley borate

5000 grams

COLOR TESTS FOR TRANSPARENT GLAZE cone 04

To 1 cup of liquid glaze, add:

1. YELLOW-BROWN

4 tsp. vanadium pentoxide
2 tsp. zircopax

2. YELLOW

3-4 tsp. yellow stain
2 tsp. zircopax

3. CHARTREUSE

3 tsp. chartreuse stain
2 tsp. zircopax

4. BLUE-GREEN

1 tsp. copper carbonate

5. DARK GREEN

1 tsp. copper oxide

6. SEA GREEN

1 tsp. copper carbonate
2 tsp. zircopax

7. ARMY GREEN

1 tsp. potassium dichromate

8. BLUE

1.5g cobalt carbonate

9. DARK BLUE

1 tsp. manganese dioxide
1/4 tsp. cobalt carbonate
1 tsp. zircopax

10. OTHER COLORS

3-4 tsp. Mason stain
2 tsp. zircopax

(tested by Bettelou Brown)

Super Slip cone 04

1 F-4 feldspar
1 silica
1 EPK
1/2 ball clay
1/2 nepheline syenite
1/8 gerstley borate

4 1/8 parts by weight

It's called "Super Slip" because it goes on clay in any state. White, dry surface. Try color variations. Use under a clear or colored transparent glaze. Mix with glazes to make them more matte.

Super Slip in a standard bucket gram weight batch – cone 04

1260 F-4 Feldspar
1260 Flint
1260 EPK
630 Ball clay (OM4)
630 Nepheline syenite
158 Gerstley borate

5198 grams

Blue Super Slip Batch – cone 04

1260 F-4 Feldspar
1260 Flint
1260 EPK
630 Ball clay (OM4)
630 Nepheline syenite
158 Gerstley borate
126 Cobalt carbonate

5234 grams

Green Super Slip Batch – cone 04

1260 F-4 Feldspar
1260 Flint
1260 EPK
630 Ball clay (OM4)
630 Nepheline syenite
158 Gerstley borate
167 Chrome oxide
250 Rutile

5615

Creamy Yellow Super Slip Batch – cone 04

1260 F-4 Feldspar
1260 Flint
1260 EPK

630 Ball clay (OM4)
630 Nepheline syenite
158 Gerstley borate
250 Rutile

5448

Fat Yellow Glaze cone 04

85 frit 3124
10 EPK
5 flint

100

Add 8% yellow stain

Add 3% bentonite

A shiny, uniform glaze. Be sure to sieve twice through a fine screen.

Substitute other colors of stain (pink and purple are interesting)

Smooth Icing Glaze cone 04

50 frit 3124
40 F-4 feldspar
10 whiting

100

Add bentonite 3%

Add stains for color.

This is a thick, semi-matte glaze with the uniform consistency of a confectioner's sugar icing.

Amber Yellow Glaze cone 04

34 gerstley borate
37 custer feldspar
14 barium carbonate
15 flint

100

Add 4% black iron oxide

A transparent, shiny glaze to use on red clay - mimics old lead glazes.

Not tested for barium release - be careful.

MJ's foam glaze cone 04

70 frit 3110
10 wollastonite
20 bone ash
5 frit 3124
5 EPK

100

A bizarre specialty glaze. Mix in small amounts only - this recipe settles like a rock. Add colorants.

For purple: add 5% manganese dioxide.

Batz Majolica Glaze cone 04

100 frit 3124
4 barium carbonate
15 EPK
20 zircopax

139

Add 3% bentonite

Add .25% tan stain to modify whiteness. This is a thick, white, shiny base glaze. It is meant to be used with overglaze colorants. To mix the overglaze colors, add 1 tsp. stain or oxide and 1 tsp. frit 3124 to a cup of water.

Weird Glaze cone 04

50 wollastonite
50 gerstley borate

100

For a yellowish green, add 6% copper carbonate.

For a jade green, add 4% chrome oxide.

Also try other colorants.

A semi-matte glaze with surface variations

Yellow-Tan Wash cone 04

Note: parts by VOLUME

3 gerstley borate
1.5 zircopax
2 rutile

6.5 parts by volume

Add ingredients to a large amount of water - this mixture should be thin. A dependable dry surface with yellow-to-tan color variations.

Red Wash cone 04

Note: parts by VOLUME

- 1 EPK
- 2 red iron oxide
- 3 gerstley borate
- 1.5 zircopax

7.5 parts by volume

Crusty Glaze Surface cone 07-cone 04

- 70 gerstley borate
- 30 titanium dioxide

100

For green, add 6% chrome oxide.

For blue, add 5% cobalt carbonate.

For tan, add 7% rutile.

For yellower mix, add 5% yellow stain.

For gold, add 10% old gold stain.

A very dry, crusty yellow surface with cracks. Apply very thickly.

Loose Skin Crawl Glaze cone 04

- 20 frit 3195
- 30 kaolin
- 50 cryolite

100

For gray/silver, add 5% copper carbonate and 2% cobalt oxide

(A specialty glaze - like it sounds.)

Gooky Crinkly Glaze cone 04

- 30 frit 3195
- 50 kaolin
- 20 cryolite

100

For blue, add 8% copen blue stain. (If copen blue is not available, try 1.5% cobalt carbonate.)

For chartreuse, add 3% copper carbonate and 4% yellow stain.

(A specialty glaze - like it sounds.)

White Shiny Glaze cone 04

- 60 frit 3124
- 15 ball clay
- 15 flint
- 10 zircopax

100

Add 3% bentonite. Can be used as a majolica-style glaze.

Watershed Stone cone 04

25 ball clay
25 EPK
25 gerstley borate
25 flint
15 lithium carbonate

115

Add 5% granular ilmenite after sieving. A dry, stony surface.

Wash of Pink cone 04

90 frit 3134
20 ball clay
20 zircopax

130

Add 3% bentonite.

Add 7% rutile.

Add 2% ilmenite

This is a near-glossy glaze with a delicate pink cast and ilmenite specks.

Bates Blue cone 04

25 borax
25 spodumene
50 EPK

100

2% cobalt carb.=deep blue

5% copper carb.=mottled green

5% iron=rusty brown

3% chrome=rich green

1% cobalt carb. + 3% chrome=teal

SBSU White Crawl cone 04

3.88 borax
46.51 gertsley borate
31.01 magnesium carbonate
18.60 EPK

100.00

Add 5.43% zircopax

Jernegan Crusty Matte cone 05- (04)

40 EPK
40 borax
20 flint
4 copper carbonate
1 cobalt carbonate

105

Water Blue cone 04

76.3 frit 3110
5.7 gerstley borate
7.1 EPK
10 flint
2 bentonite

101.1

Use over white slip unless you want a very dark color

COLOR VARIATIONS for Water Blue (use only ONE per batch of plain glaze)

4.5% copper carbonate=turquoise
5% copper carbonate + 3% cobalt carbonate=deep blue
5% vanadium=yellow (or try yellow stain)
4% manganese dioxide + 1/2% cobalt carbonate=purple
5% manganese=burgundy purple
6% rutile=yellow
6% red iron oxide=deeper yellow

Suede cone 06-04

80 GB
20 bone ash

100

Terra sigillata cone 04

1170 EPK
230 ball clay
7 calgon
14 cups of water

Mix all the ingredients and let sit overnight. The next day decant the middle layer and throw the rest away (or put it into the recycling bin.)

Terra sigillata means "earthseal" in Latin. It is a very thin slip made of fine particles of clay. Apply it to bone dry clay that you have dampened a little (a spray-bottle works well). As the terra sigillata dries on your piece burnish it with a piece of an old t-shirt. You can make various colors by adding oxides and stains to the base recipe.

Adam's Dense Black cone 06-04

24.6 nephelene syenite
15.2 gerstley borate
17.8 barium carbonate
9.7 lithium
24.6 flint
8.1 EPK
10 black stain
2 black copper oxide
4 black iron oxide
1 cobalt oxide

117

Michelle's Bubble Glaze cone 04

30 frit 3195
30 EPK
40 cryolite

100

Add 5% manganese dioxide.

Archie Bray Black Slip cone 04

500 Redart clay
250 ball clay
150 manganese dioxide
120 black stain
50 black iron oxide

1070

BB's Amazing Slip III

34 Frit 3124
33 EPK
33 Silica

100

A white slip that goes on bisque or greenware. Goes over glazes for interesting effects. Highfires well (but expect some colors such as pink to burn out in highfire).

To get colors of BB's Slip III, add **one** of the following variations to the basic recipe:

1. Very Earthy Green

Add 14% rutile, 4% copper carbonate.

2. Earthy Chrome Green

Add 15% rutile, 2.5% chrome oxide.

3. Still Earthy Green

Add 3% copper carbonate.

4. Bright Chrome Green

Add 2.5% chrome oxide.

5. Nice Pink

Add 10% Deep Crimson Mason Stain #6006.

6. Great Purple

Add 10% Pansy Purple Mason Stain #6385.

7. Grey Blue

Add 1% cobalt carbonate.

BB's Amazing Slip IV

34 frit 3124

22 talc

22 ball clay

22 kaolin

100

Like BB's Amazing Slip III, this slip goes on bisque or greenware. For strange effects, you can put it over glazes. It can be highfired (but be aware that some delicate stains, especially pink, will burn out at high temperature). In general, BB's IV makes more neutral colors than BB's III.

To get colors of BB's Slip IV, add **one** of the following variations to the basic recipe:

1. Dull Pink

Add 10% zircopax and 10% Deep Crimson Mason Stain #6006.

2. Grey Purple

Add 10% zircopax and 10% Pansy Purple Mason Stain #6385.

3. Very Pale Yellow

Add 10% zircopax and 3% praseodymium Yellow Mason Stain #6433.

4. Nice Grey Blue

Add 10% zircopax and 1% cobalt carbonate.

Following is a series of washes that can be fired to cone 04. A wash should be made extremely thin, like water. Used alone, it will reveal all the texture of your clay surface. Used underneath a glaze, it may affect the color of the glaze.

All of the BB Washes are made by volume rather than by weighing, so making them is quick and easy.

BB's Tan Wash

1 frit 3134
1 zircopax
3 rutile

5

BB's Orange Red Wash

1 frit 3134
1 zircopax
3 yellow iron oxide

5

BB's Rust Brown Wash

1 frit 3134
1 zircopax
3 red iron oxide

5

BB's Black Wash

1 frit 3134
1 zircopax
1 red iron oxide
1 black iron oxide
1 manganese dioxide

5

BB's Grey Wash

1 frit 3134
1 zircopax
3 copper carbonate

5

BB's Green Wash

1 frit 3134
1 zircopax
3 chrome oxide

5

Jackie's Base Glaze with no gerstley borate (BB) cone 04

20 frit 3134
10 magnesium carbonate
8 borax
10 lithium carbonate
5 nepheline syenite
5 EPK
42 silica

100

Add: 5% zircopax.

Add: 3% bentonite + flocs to prevent bad settling in the bucket.

This is Bettelou Brown's reformulation of the classic Jackie Rice base glaze, but without any gerstley borate in it. As of June, 2000, gerstley borate is no longer being mined.

This variation preserves the waxy matt surface and the good color response of the original glaze.

BB's Crusty Cracks I - cone 04

34 magnesium carbonate
43 frit 3134
19 nepheline syenite
14 kaolin

110

Brushed on thick, it gives big cracks. A thin application gives a matt surface with cracks in some areas. Color: white. Try adding 15% of a mason stain for good color.

BB's Crusty Cracks II - cone 04

34 magnesium carbonate
33 frit 3134
19 nepheline syenite
24 kaolin

110

Brush on thin, one coat only!! Makes a matt surface with small cracks. If you put it on too thick, it will peel off after firing. Color: white. Try adding 15% of a mason stain for good color.

Beaded Glaze - cone 04

66.66 magnesium carbonate
53.34 borax
66.66 gerstley borate
13.35 flint

200.01

This is a wild glaze. Applied thickly in just the right way, it crawls and beads for an interesting effect. The plain recipe is tan.

For the following color variations, add the specified ingredient to the base recipe:

1. Blue Bead

Add 2% cobalt carbonate.

2. Kelly Green Bead

Add 2% chrome oxide.

3. Teal Bead

Add 1% cobalt oxide + 1% chrome oxide.

4. Cracked Lime

Add 2% nickel oxide. The surface of the glaze will be a little drier - more cracked than beaded.

5. Dark Cracked Tan

Add 2% yellow iron oxide. The surface of the glaze will be a little drier - more cracked than beaded.

Icy Opaque Matte - cone 04

30 Frit 3124

30 EPK

40 Whiting

100

Add: 3% bentonite

Flocs (this glaze really sinks to the bottom of the bucket if you don't use bentonite and flocs).

For colors, try adding:

4% stain

or 3% raw oxides

For specks: *After* sieving, add 4% *granular* manganese.