

Priscilla Hollingsworth/glazes used at Augusta State University

HIGHFIRE

Last revised January 27, 2010

Liz Sparks stoneware clay – cone 10

30 Lizella
20 ball clay OM4
10 G-200 feldspar
10 sand
5 flint
25 EPK or Georgia kaolin

100

A toasty brown clay fired in a reduction gas kiln. The clay body is sturdy. It brings out the brown tones in glazes. It is a beautiful clay body. Every clay body is different to work with. This one will crack and shrink less than a smooth body.

Domestic Porcelain cone 10

31 Kaolin (T-6 or other local kaolin)
15 EPK
25 G-200 feldspar
15 flint
8 pyrotrol
6 ball clay (OM4)

100

Add 2% bentonite

This porcelain is pretty easy to throw and is less expensive than porcelain made from English clays. However, it is not as white as an English porcelain. Note that you can't make anything large (over about 3 pounds) or anything very thick unless you add some sand or other temper.

Stoneware Clay Body #1 cone 9-10 – NOT IN USE CURRENTLY

50 New FHC
25 Hawthorn Bond
10 ball clay
10 kaolin
5 G-200 feldspar

1 00

Add 5% sand or grog if desired.

A very low-iron throwing body, reasonably easy to work with, rather bland in highfire reduction. White in raku. We are not using this recipe currently because of trouble with some of the raw ingredients.

Stoneware Clay Body #2 cone 9-10

50 Goldart
30 Hawthorn Bond
20 ball clay
12 Lizella clay
10 feldspar (G-200)

122

Add sand and/or grog to taste.

Stoneware for TomMac cone 9-10

15 FHC
15 Goldart
20 Hawthorn Bond
13 Lizella
20 ball (OM4)
10 flint
7 G-200 feldspar

100

Add sand and/or grog to taste

Red Deb Glaze - cone 9-10

(KPG)

4869 custer feldspar
2157 flint
631 kaolin
631 talc
791 whiting
996 bone ash
913 red iron oxide
270 bentonite

11,258

Iron red glaze.

Mason Red Glaze - cone 9-10

(KPG)

6000 G-200 feldspar
1680 bone ash
930 dolomite
750 red iron oxide

570 ball clay
750 flint

10,680
Iron red glaze.

Tomato Red Glaze cone 9-10 (BB)

54 F-4 feldspar
29 flint
8 EPK
8 magnesium carbonate
13 bone ash
8 red iron oxide
2 bentonite

122
Looks better at cone 9 than cone 10. Iron red glaze.

Hayden's Red Glaze – cone 9-10

200 custer feldspar
100 EPK
40 whiting
64 dolomite
32 bone ash
20 tin oxide
4 bentonite
20 red iron oxide

480
Interesting glaze – it varies from iron red to yellow, depending on thickness of application.

Blue Chun Glaze - cone 9-10

(KPG)
4210 G-200 feldspar
180 EPK
2720 flint
900 whiting
880 gerstley borate
880 dolomite
170 zinc oxide
260 tin oxide

10,200
plus:
400 rutile

50 copper carbonate

Chun glaze is an ancient and traditional Chinese glaze. It is not usually very blue. Traditionally blue in a Chun is caused by the reduction of rutile, which can be chancy. Expect a creamy glaze that spreads into several visual layers. You might get hints of lavender as well as blue.

A Bluer Chun – cone 9-10 (Frits Hommes variation)

Start with the basic Blue Chun recipe above. To the 10,200 g recipe, add 96 g cobalt carbonate. *Leave out the copper carbonate* (but keep the rutile in). This yields a light blue Chun with consistent light blue color, while preserving some of the traditional Chun color variation.

Plum Chun Glaze (KPG)

Start with the basic Blue Chun recipe above.

Delete rutile and copper.

Add 2% copper carbonate.

Add .5% cobalt carbonate.

Woo's Blue Glaze - cone 9-10

(KPG)

4200 G-200 feldspar

2700 flint

1800 whiting

1300 OM4 ball clay

400 red iron oxide

400 rutile

100 bentonite

10,900

Woo tends to be blue where thicker and gold where thinner.

Segar Blue Glaze - cone 9-10

(KPG)

3360 G-200 feldspar

1440 whiting

1040 ball clay

2160 flint

240 rutile

320 red iron oxide

8560

Rutile Blue Glaze - cone 9-10 (KPG)

790 dolomite

1500 G-200 feldspar
555 whiting
840 EPK
1315 flint
400 rutile

5400

#1 Shino Glaze - Reduction cone 9-10 (KPG)

3750 nepheline syenite
1000 OM4 ball clay
250 EPK
250 soda ash
250 spodumene

5500

Add 10% redart clay.

Bray Shino – cone 9-10

14.6 Custer feldspar
12.6 Spodumene
2.9 EPK
50.0 Nepheline syenite
16.6 Ball clay
3.3 Soda ash

100

Carbon Trap - cone 9-10 (a shino)

45 nepheline syenite
10.8 F-4 feldspar
15.2 spodumene
15 ball
10 EPK
4 soda ash

100

Shino (Steve Loucks) - cone 9-10

45 nepheline syenite
15 spodumene
10 F-4 feldspar
15 OM4 ball clay
10 EPK
5 red art
18 soda ash

118

This shino recipe traps carbon well.

Buckwheat Glaze - Reduction cone 9-10 (KPG)

4240 G-200 feldspar

2030 EPK

1370 dolomite

840 whiting

680 zircopax

100 red iron oxide

100 rutile

9360

Lung Chaun Celadon Glaze cone 9-10

(BB)

51 custer feldspar

29 flint

11 EPK

20 whiting

111

Add 1% black iron oxide

A light greenish celadon glaze

Sky Celadon Glaze cone 9-10 (BB)

30 flint

20 whiting

49 potash feldspar

1 red iron oxide

100

Wonderful White Glaze cone 9-10 (BB)

27.0 K-200 feldspar

12.0 gerstley borate

8.8 dolomite

19.5 talc

7.5 ball clay

25.2 flint

100.0

A semi-matte white glaze

Variations on Wonderful White:

to the base glaze, add

Wonderful Lavender

Add .5% cobalt carbonate

Wonderful Purple

Add 1% cobalt carbonate

Wonderful Green (Teal)

Add .5% cobalt carbonate

Add 1% chrome oxide

Wonderful Khaki & Cream

Add 3% rutile

Add 3% copper carbonate

Celadon Base Glaze cone 9-10 (BB)

42.2 nepheline syenite

10.0 whiting

5.4 EPK

5.0 soda ash

29.4 flint

2.0 zinc oxide

2.0 bentonite

96.0

Celadon Variations:

to base glaze, add

Purple/Black Celadon

Add 3% manganese dioxide

Green Celadon

Add 6% copper carbonate

Bright Blue Celadon

Add .5% cobalt carbonate

Sea Green to Tan Celadon

Add 6% rutile

Add 6% copper carbonate

Purple-Blue to Tan Celadon

Add 6% rutile

Add 3% manganese dioxide

Blue to Tan Celadon

Add 6% rutile

Add .5% cobalt carbonate

Green and Blue Celadon

Add 6% copper carbonate

Add .5% cobalt carbonate

Peach Bloom Glaze cone 10 (BB)

27.1 nepheline syenite

16.8 gerstley borate

12.4 dolomite

40.9 flint

.95 copper carbonate

.95 rutile

.95 tin

100.05

This glaze must go to cone 10. Lots of color variation within the glaze.

Reduction must be heavy. Glaze must be applied thick but not too thick. Not for beginners!

St. John's Iron Yellow Glaze cone 9-10 (Gyvonne's glaze)

33 flint

7 ball clay

7 whiting

12 dolomite

41 custer feldspar

100

Add 10% red iron oxide

This is not a bright yellow. It's a dark iron yellow that can burn to dark brown or even black if it is used over a high-iron clay body.

St. John's Black Glaze cone 9 &10 (BB)

75 Alberta Slip

35 nepheline syenite

5 cobalt carbonate

115

A shiny, dark black-blue glaze. Works well with peach bloom glaze.

Ox Blood Red/Green Glaze cone 9-10 (BB)

42 nepheline syenite
9 custer feldspar
2 kaolin
23 flint
13 gerstley borate
11 whiting

100

Add 3% black copper oxide

Add 1% tin oxide

Add 3% bentonite

Looks better at cone 9 than cone 10. In our kiln, this glaze may come out all green, or it may be part green and part red.

Albany Celadon Glaze cone 9 (AC)

50 Albany slip
20 whiting
10 flint
20 cornwall stone

100

Saturated Iron Glaze cone 9 (AC)

41 feldspar
30 flint
21 whiting
8 kaolin
15 red iron oxide

115

Your basic temmoku glaze (black where thick, brown where thin)

Jack's Blood Red Glaze cone 9 (AC)

72.5 potash feldspar
10.9 gerstley borate
7.2 whiting
7.2 flint (400 mesh)
1.1 tin oxide
1.1 copper carbonate

100.0

Apply thickly and reduce heavily.

Clear cone 9 Glaze (AC)

44 soda feldspar
18 whiting
10 kaolin
28 flint
1 red iron oxide

101

This shiny clear glaze is slightly on the celadon side (gray to green).

Jack's Yellow Glaze cone 9 (AC)

80 feldspar
30 kaolin
44 dolomite
8 whiting
8 rutile

170

Cool Spodumene White Glaze cone 9 (AC)

80 feldspar
30 kaolin
44 dolomite
8 whiting
40 spodumene

202

Satin Black cone 9-10

20 custer feldspar
20 F-4 feldspar
15 dolomite
13 talc
20 flint
10 ball clay
2 whiting

100

Add: 1 chrome oxide
3 red iron oxide
2 manganese dioxide
3 cobalt oxide
2 bentonite

Turner Beauty - cone 9-10

30 potash feldspar
20 EPK
22 dolomite
2 calcium carbonate
20 spodumene
4 tin oxide
1 rutile
.5 copper carbonate

99.5

A zillion shades of brown, responding to variations in thickness.

Sana's Green - cone 9-10

29.12 custer feldspar
9.17 whiting
11.65 gerstley borate
7.76 barium carbonate
2.91 magnesium
4.85 EPK
31.06 flint
2.91 tin oxide

99.43

Add:

4.85% copper carbonate
4.85% rutile
2.00% bentonite

Many shades of green, sometimes with areas of blue.

Rob's Green – cone 9-10

63.5 cornwall stone
15.2 whiting
4.3 gerstley borate
3.0 bentonite
8.5 copper carbonate

94.5

A rich, deep translucent green with dark copper spots.

Limestone White - cone 10

(Tom Coleman)

26.68 custer feldspar
13.83 ball clay (OM4)

6.92 EPK
20.36 whiting
32.21 flint

100.00
Add:
2.00% bentonite

This is whitish over stoneware. It turns into a clear celadon over porcelain.

Yanagahara's Lavender - cone 10 (Tom Coleman)

38.50 custer feldspar
12.50 talc
16.30 whiting
2.90 bentonite
2.90 EPK
26.90 flint

100.00
Add:
4.00% cobalt carbonate

This is a dark blue glaze with some lighter blushing that can appear lavender. It works well over stoneware.

Iron Blue Celadon - cone 10

(Tom Coleman)

40.00 cornwall stone
30.00 flint
10.00 EPK
10.00 dolomite
5.00 barium carbonate
5.00 zinc oxide

100.00
Add:
2.30% yellow iron oxide
2.00% bentonite

Lipstick Purple - cone 10

(Tom Coleman)

65.09 custer feldspar
9.74 gerstley borate
.89 EPK
8.86 whiting
10.26 flint
2.21 dolomite

1.11 barium carbonate
.44 zinc oxide
1.40 tin oxide

100.00

Add:

.3% copper carbonate
.2% iron oxide
.1% rutile

Blue Celadon - cone 9-10 (Steve Loucks)

50 custer
8 barium carbonate
6 strontium carbonate
7 whiting
5 grolleg
24 flint

100

Add 2% Spanish red iron oxide

Fake Yellow Ash - cone 9-10 (Steve Loucks)

50 Alberta slip
30 whiting
15 EPK
5 rutile

100

This glaze runs a lot. This is because it reproduces the attractive runny patterns that can typically be found in ash glazes. Watch out! If you apply too much, this glaze will glue your pot to the shelf.

Amber Celadon - cone 9-10

33 Alberta slip
20 custer feldspar
13 wollastonite
7 whiting
3 gerstley borate
3 EPK
14 flint
7 yellow ochre

100

Oribe Green - cone 9-10 (Vince Pitelka)

1.05 bone ash

7.81 talc
22.36 whiting
30.91 custer feldspar
12.55 EPK
25.32 flint

100.00
Add: 5.49% black copper oxide
2.00% bentonite

Oribe is a traditional Japanese glaze. It is mostly matte, with lots of variations in the green color.

Light Green Celadon - cone 9-10 (Vince Pitelka)

48.5 custer feldspar
28.2 flint
10.8 EPK
13.0 whiting

100.5
Add: 0.75% red iron oxide
0.25% chrome oxide
2.00% bentonite

Mellow Salt Glaze - cone 10

63.9 nepheline syenite
21.1 dolomite
16.0 zircopax
4.3 OM4 ball clay

105.3
Add: 1.0% red iron oxide
4.0% bentonite

This usually comes out as a very attractive light yellow. It reacts with iron in the clay body, typically forming brown spots and streaks. The surface is matte.

Copper Salt Glaze (variation) – cone 10

Use the above Mellow Salt recipe. Don't add the red iron oxide. Instead, add 1.8% copper carbonate + .125 cobalt carbonate (that's POINT 125 %, or a very small amount).

Mamo Matte Glaze – cone 9/10

49 F-4 feldspar
19 dolomite
20 EPK
4 whiting
8 tin oxide

100

Add: 2% bentonite

Vapor Blue - cone 10

45.0 custer feldspar

17.0 whiting

11.0 EPK

27.0 flint

100.0

Add: 4.0% cobalt carbonate

4.0% bentonite

A very intensely blue glaze. It looks best on porcelain. For stoneware, Yanagahara's
Lavender tends to look better.

Don's Red – cone 10

43.92 custer feldspar

15.78 gerstley borate

6.27 EPK

19.01 silica

12.17 whiting

2.85 tin oxide

100.00

Add: 0.47% copper carbonate

0.47% red iron oxide

A cherry to tomato red. Copper reduction red glaze. From Tom Coleman.

Coleman-Sperry White Mud Crack – cone 8-10

50 nepheline syenite

50 magnesium carbonate

100

This is not really a glaze. It's a highly cracked white surface that allows the clay body to
show through between the cracks. It's a recipe made famous by Robert Sperry, who
taught at the University of Washington.

Milk Glaze – cone 9-10

68 dolomite

105 gerstley borate

135 talc

90 whiting

293 F-4 feldspar
68 kaolin
241 flint
90 zircopax

1090

Vanadium Green – cone 9-10

31 nepheline syenite
31 whiting
14 fireclay (Foundry Hill Cream is the one we use)
2 copper oxide (black)
8 vanadium pentoxide

86

This is a TOXIC glaze! Do not use it on surfaces that come into contact with food or drink! It yields interesting mottled, gray-green effects. It's mostly a matte surface.

Bringle White Liner – cone 10

1862 soda spar (F-4 feldspar, in our case)
402 gerstley borate
402 talc
402 dolomite
198 whiting
198 zinc
198 ball clay
1238 flint
88 bentonite

4988

A reliable, shiny, opaque white glaze.

