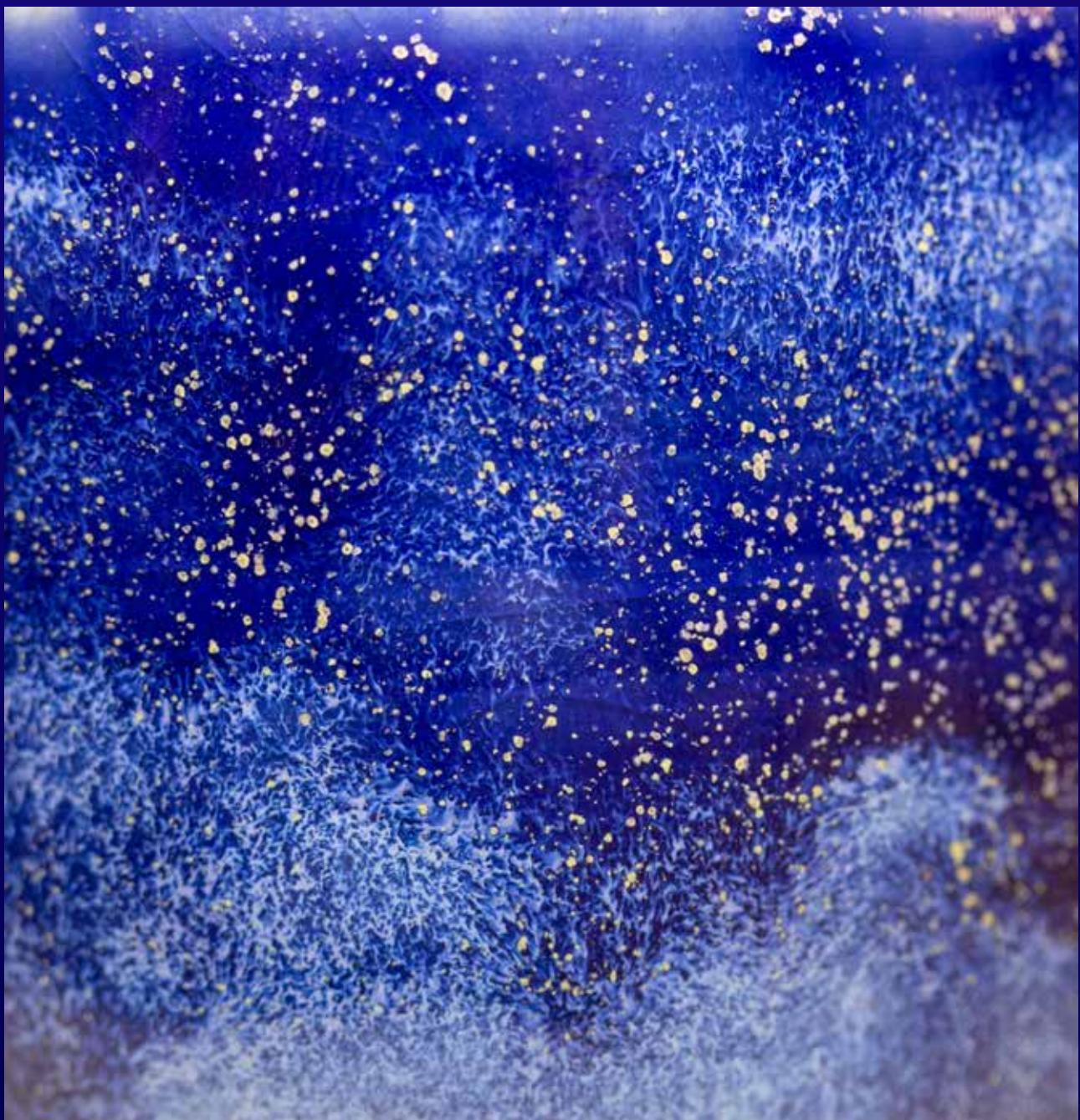


Glaze Experiments

Julia Hindle

2019-2021



Intro

Over the last two years, I've been developing my own glazes working off of existing recipes that I primarily picked up from John Britt's *The Complete Guide to Mid-Range Glazes*, John Hesselberth and Ron Roy's *Mastering Cone 6 Glazes*, Bill Jones' *Cone 5-6 Glazes*, and various internet resources.

This document is an overview of my favorite recipes with photo examples of each one. For all of these glazes, I fired to $\Delta 6$ oxidation in a manual kiln, which usually takes 7.5 hours to reach a peak temperature of around 2222 °F. For the most part, I brushed three coats of glaze on each test tile unless otherwise noted. All test tiles are 181 white stoneware that has been bisqued to $\Delta 06$ and are around 1 inch by 1 inch.

I didn't provide any units of measurement for the glaze recipe ingredients because all of the amounts are proportional. The base recipes each add up to 100, which you can treat as 100% or 100 grams. I worked in small test batches of around 10 grams (so divided each ingredient's amount by 10) until I decided to scale up the recipe to my actual pieces, in which case I usually worked in batches of around 300 grams.

The two base glazes I worked off of the most were Chun Seafoam and Randy's Red (minus the additives). You'll find the best of those recipes first in this document. I want to note that a number of these glazes may not be suitable for functional wares due to high quantities of metal oxide additives, use of barium carbonate in the base (e.g., Heino), and/or the base glaze not being stable enough.

Pages 2 through 10 have my recipes and test tiles, and then pages 11 through 17 have some examples of my glazes on finished work. You can find all of these recipes on my Glazy account at glazy.org/u/juliahindle/recipes. To ask any follow up questions, feel free to reach out to me via my email julia.hindle@gmail.com.

Chun Base

F-4 Feldspar.....	41
Silica.....	27
Whiting	15
EP Kaolin	5
Zinc Oxide.....	12

Seafoam

Add:	
Copper Carbonate.....	5
Titanium Dioxide	5

Metallic Teal

Add:	
Copper Carbonate	5
Titanium Dioxide.....	5
Cobalt Carbonate	3

Gunmetal Green

Add:	
Black Copper Oxide	4.6
Chromium Oxide	1.5

Blue Shift

Add:	
Rutile.....	3.7
Cobalt Carbonate	0.3
Black Copper Oxide	0.8

Sky Blue

Add:	
Rutile.....	3.7
Cobalt Carbonate	0.3
Black Copper Oxide	0.8
Titanium Dioxide.....	3

Iron Shift

Add:	
Red Iron Oxide	8
Titanium Dioxide	3

Cobalt Blue

Add:	
Cobalt Carbonate.....	2.5
Titanium Dioxide	3.5

Starry Night

Add:	
Cobalt Carbonate.....	2
Red Iron Oxide.....	4
Titanium Dioxide	3

Cornflower Blue

Add:	
Cobalt Carbonate.....	3
Rutile	1
Titanium Dioxide	4

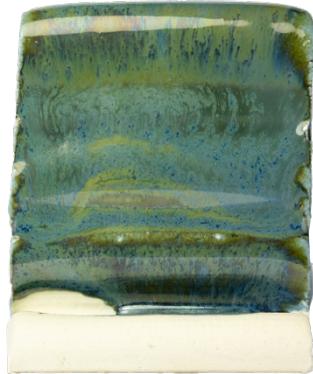
Credit to John Britt's *The Complete Guide to Mid-Range Glazes* for Chun Seafoam recipe (p. 108). The other variations are my own.

Note: Substituting nepheline syenite for F-4 doesn't affect the appearance of the glaze much. Minspar 200 would also be a good candidate for replacement. I know F-4 is hard to get your hands on these days.

Chun Base



Seafoam



Metallic Teal



Gunmetal Green



Blue Shift



Sky Blue



Iron Shift



Cobalt Blue



Starry Night



Cornflower Blue

Randy's Base

Gerstley Borate	31.7
Talc	13.8
F-4 Felspar	19.8
EP Kaolin	5
Silica	29.7

Tea Green

Add:	
Chromium Oxide	0.15

Pine

Add:	
Chromium Oxide	1

Teal

Add:	
Cobalt Carbonate	6
Titanium Dioxide	4
Chromium Oxide	1.3

Avocado

Add:	
Titanium Dioxide	5.2
Black Copper Oxide	4.2

Sea Green

Add:	
Copper Carbonate	6

Rain Cloud

Add:	
Red Iron Oxide	2
Cobalt Oxide	0.5
Rutile	5

Gunmetal Gray

Add:	
Copper Carbonate	2.5
Manganese Dioxide	2.8
Chromium Oxide	1.3

Charcoal

Add:	
Black Copper Oxide	4.6
Chromium Oxide	1.5

Cotton Candy

Add:	
Silicon Carbide (1000 mesh)	0.8
Tin Oxide	2
Copper Carbonate	1.5

Powder Blue

Add:	
Rutile	4
Cobalt Carbonate	0.25

Periwinkle

Add:	
Cobalt Carbonate	1

Indigo

Add:	
Cobalt Carbonate	3

Sand

Add:	
Red Iron Oxide	4

Dark Sand

Add:	
Red Iron Oxide	10

Chocolate

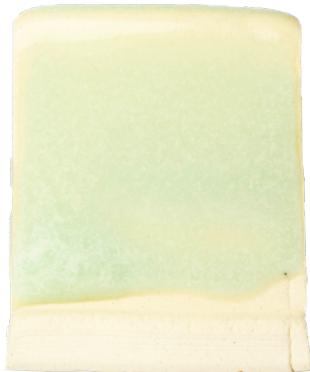
Add:	
Red Iron Oxide	10.1
Manganese Dioxide	6.4
Tin Oxide	3.7

Oxblood

Add:	
Red Iron Oxide	20

Credit to the existing Randy's Red recipe that floats around the internet. The variations listed here are my own.

Randy's Base



Tea Green



Pine



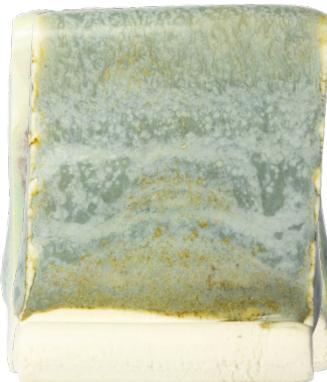
Teal



Avocado



Sea Green



Rain Cloud



Gunmetal Gray



Charcoal



Cotton Candy

Randy's Base



Powder Blue



Periwinkle



Indigo



Sand



Dark Sand



Chocolate



Oxblood

Heino Base

Nepheline Syenite.....	57.5
Silica.....	7.1
Ball Clay.....	6.2
Barium Carbonate.....	26.5
Lithium Carbonate	2.7

Cobalt Blue

Add:

Copper Carbonate.....	3
Cobalt Carbonate	1



Cobalt Blue

Copper Blue

Add:

Copper Carbonate.....	3
-----------------------	---



Copper Blue

Aquamarine

Add:

Copper Carbonate.....	3
Rutile	4

Credit to John Britt's *The Complete Guide to Mid-Range Glazes* for Heino recipes (p. 120). The last variation is my own.



Aquamarine

Behrens Satin Matte Base

F-4 Feldspar	34.9
Zinc Oxide	25.8
Silica.....	22.6
Whiting	12.6
EP Kaolin	4.1

Cream

Add:
Rutile



Cream

Green

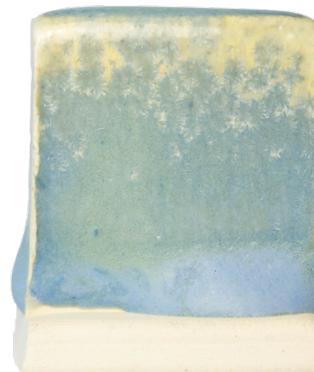
Add:
Rutile



Green

Blue

Add:
Rutile



Blue

Credit to Richard Behrens for Satin Matte Cream recipe. Credit to Alisa Liskin Clausen for inspiration to add copper carbonate, based on [this Glazy post](#). The last variation is my own.

Burgundy

Custer Feldspar	31
Silica	18
Whiting.....	21
EP Kaolin	9
Talc	4
Frit 3134.....	9
Gerstley Borate	8

Add:

Tin Oxide	5
Chromium Oxide.....	0.2



Lynette's Opal

Nepheline Syenite	38
Silica	25
Whiting.....	7
EP Kaolin	8
Wollastonite	2
Talc	5
Gerstley Borate	10
Zinc Oxide	5

Add:

Rutile	8
--------------	---



Arrowmont Blue-Green

Nepheline Syenite	44.6
Silica	13.3
Whiting.....	11.1
EP Kaolin	13.3
Gerstley Borate	11.1
Lithium Carbonate.....	6.6

Add:

Titanium Dioxide	6.2
Cobalt Carbonate.....	3



Credit to John Britt's *The Complete Guide to Mid-Range Glazes* for all three recipes (p. 99, 76, 112, respectively).

Increased cobalt carbonate in Arrowmont from 1 to 3.

Ashley's Best

Nepheline Syenite.....	27.2
Silica.....	25.3
EP Kaolin	13.3
Dolomite.....	16.2
Talc.....	11.4
Lithium Carbonate	6.6

Add:

Cobalt Carbonate	4
------------------------	---



Bright Purple

F-4 Feldspar.....	35
Silica.....	19
Whiting	17
Ball Clay.....	12
Talc.....	5
Magnesium Carbonate.....	2
Gerstley Borate.....	10

Add:

Cobalt Carbonate	4
------------------------	---

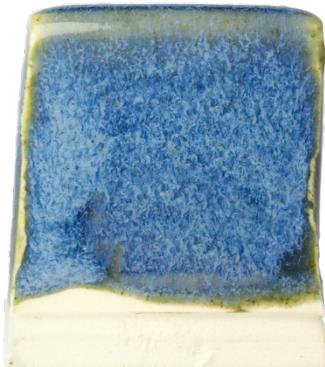


Bright Sky Blue

G-200 Feldspar.....	20
Silica.....	18.5
EP Kaolin	20
Talc.....	11.5
Wollastonite.....	10
Frit 3134	20

Add:

Red Iron Oxide	0.5
Rutile	6
Cobalt Carbonate	1



Credit to John Britt's *The Complete Guide to Mid-Range Glazes* for all three recipes (p. 125, 125, 176, respectively).



3-4 coats of Chun Sky Blue (p. 2)



3 coats of Chun Metallic Teal (p. 2)



3-4 coats of Randy's Avocado (p. 4)



3-4 coats of Behrens Satin Matte Cream (p. 8)



3 coats of Randy's Oxblood (p. 4)



3-4 coats of Randy's Gunmetal Gray (p. 4)



4 coats of Randy's Periwinkle (p. 4)



4 coats of Randy's Indigo (p. 4)



3-4 coats of Chun Iron Shift (p. 2)



4 coats of Randy's Powder Blue (p. 4)



3-4 coats of Chun Seafoam (p. 2)



3-4 coats of Chun Cobalt Blue (p. 2)



3 coats of Randy's Chocolate (p. 4)



4 coats of Heino Cobalt Blue (p. 7)



2 coats of Lynette's Opal (p. 9) over 2 coats of Ashley's Best (p. 10)



2 coats of Chun Starry Night (p. 2) over 2 coats of Chun Seafoam (p. 2)



Left to right: 3 coats of Randy's Sea Green (p. 4); 3 coats of Arrowmont Blue-Green (p. 9); 3 coats of Randy's Rain Cloud (p. 4); 4 coats of Randy's Tea Green (p. 4)



Top to bottom, left to right: 4 coats of Randy's Dark Sand (p. 4); 4 coats of Heino Copper Blue (p. 7); 3 coats of Bright Purple (p. 10); 3 coats of Burgundy (p. 9); 3 coats of Bright Sky Blue (p. 10)



Left to right:

2 coats of Lynette's Opal (p. 9) over 2 coats of Randy's Charcoal (p. 4)

2 coats of Chun Sky Blue (p. 2) over 2 coats of Chun Metallic Teal (p. 2)

2 coats of Chun Seafoam (p. 2) over 2 coats of Chun Starry Night (p. 2)



Left to right:

2 coats of Lynette's Opal (p. 9) over 2 coats of Randy's Periwinkle (p. 4) on top half, 3 coats of Chun Cobalt Blue (p. 2) on bottom half

2 coats of Randy's Teal (p. 4) over 2 coats of Randy's Periwinkle (p. 4)

1 light coat of Chun Seafoam (p. 2) sprayed on top third over 3 coats of Chun Cobalt Blue (p. 2) on red stoneware 308