# What Glaze Recipes Can Tell You



Washington Street
STUDIOS

SHARING CREATIVE ENERGY & KNOWLEDGE

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# Recipe Characteristic VS. Glaze Property

- Type of Flux

   Firing Temperature
   Color Response
   Possibility of Crazing
   Glossy VS. Satin Texture
- Mix of Fluxes
   Width of Firing Range
- Amounts of Fluxes
   Temperature Stability

- Amounts of Stabilizer
   Stability in the Bucket
   Possibility of Crawling
   Fluidity of Melted Glaze
- Amount of Silica
   Shiny VS. Matte Texture
- Unusual Ingredients
- Potentially Unsafe Ingredients

# Seger Categories of Glaze Components (Oxides)

**Fluxes** 

Alkali Metals - Lithium

Sodium

Potassium

Alkaline Earths - Magnesium

Calcium

Strontium

Barium

+Zinc

Boron

**Stabilizers** 

Aluminum

**Glass-Formers** 

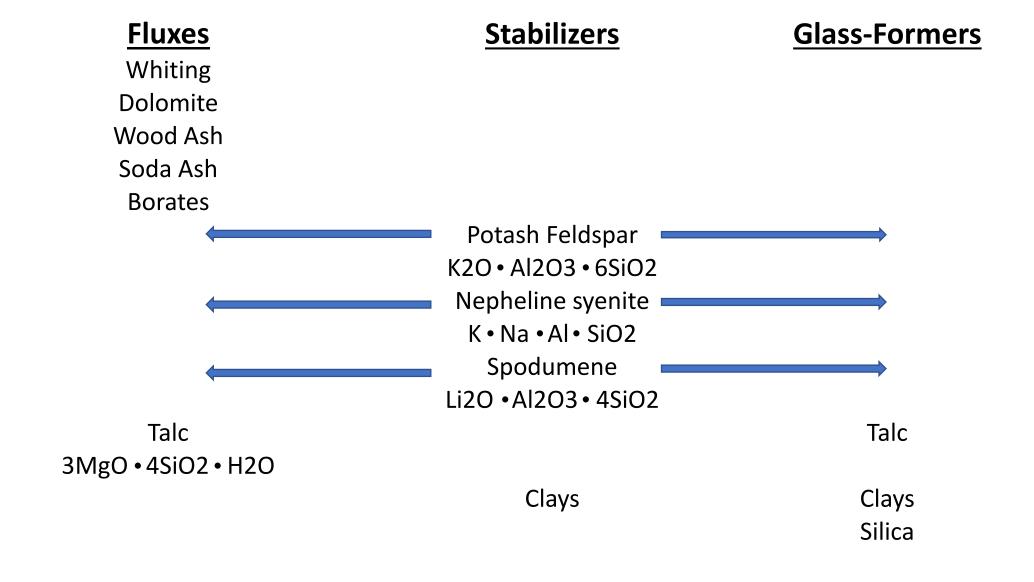
Silicon

+Boron

Titanium

Phosphorous

## Oxides From Recipe Ingredients



# Glaze Recipe 1: Green

### **Ingredients**

Whiting 34%

Custer feldspar 46%

EPK 20%

### **Additives**

Copper carbonate 5%

# Glaze Recipe 2: Green

### **Ingredients**

Whiting 8%

Custer feldspar 60%

Silica 16%

Zinc oxide 16%

### **Additives**

Nickel carbonate

Rutile

# Glaze Recipe 3: Cone 6 Woo Yellow

### **Ingredients**

Dolomite	15.41%
Strontium carbonate	23.90%
Nepheline syenite	42.50%
Kaolin	9.04%
Silica	9.04%

### **Additives**

Zircopax	19.23%	
Bentonite	4.76%	
Red Iron oxide	3.57%	

# Glaze Recipe 4: Cone 6 Odyssey Blue

### **Ingredients**

Gerstley borate 20% (Calcium, Boron)

Whiting 10% (Calcium)

Nepheline syenite 30% (Sodium)

EPK 10%

Silica 30%

# Glaze Recipe 5: Cone 6 Chun Base

### **Ingredients**

Whiting	14%
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Zinc oxide 12%

F-4 feldspar 38%

Kentucky ball clay 6%

Silica 30%

# Glaze Recipe 6: Cone 6 Water Blue

### **Ingredients**

Gerstley borate	6%
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Ferro frit 3110 77%

EPK 7%

Silica 10%

### **Additives**

Copper carbonate 2%

Bentonite 3%

# Glaze Recipe 7: Cone 6 Celadon Base

### **Ingredients**

Gerstley borate	14.5%
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Whiting 10.4%

Nepheline syenite 54.3%

Silica 20.8%

### **Additives**

Copper carbonate 0.5%

Bentonite 4.0%

# Glaze Recipe 8: Cone 6 Base

### **Ingredients**

Ferro frit 3110	19.0%
Ferro frit 3134	8.0%
G-200 feldspar	27.5%
Whiting	13.5%
Strontium carbonate	5.0%
EPK	19.0%
Silica	8.0%

# Glaze Recipe 9: Cone 6 Base

### **Ingredients**

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	<b>40.</b> .	26.17%

Ferro frit 3124	34.97%
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33.96%

Silica 4.90%

# Glaze Recipe 6: Cone 6 Water Blue

### **Ingredients**

Gerstley borate	6%
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Ferro frit 3110 77%

EPK 7%

Silica 10%

### **Additives**

Copper carbonate 2%

Bentonite 3%

# Glaze Recipe 10: Cone 9-10 Lehman Blue

### **Ingredients**

Dolomite	12.09%
Gerstley borate	2.20%
Strontium carbonate	6.59%
Whiting	7.69%
Nepheline syenite	36.26%
EPK	1.10%
Silica	34.07%

### **Additives**

Cobalt carbonate	0.66%
Red iron oxide	2.20%
Rutile	4.40%
Bentonite	3.30%

# Glaze Recipe 11: Cone 6 Clear

### **Ingredients**

Ferro frit 3195 70.0% (3195: Na, Ca, B, Al<sub>2</sub>O<sub>3</sub>)

EPK 8.0%

Wollastonite 10.0%

Silica 12.0%

### **Additives**

Bentonite 2.0%

# Glaze Recipe 12: Lithium Matte

### **Ingredients**

Lithium carbonate	70.0%
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Bentonite 15.0%

Borax 10.0%

Custer feldspar 5.0%

# Glaze Recipe 13: Cone 9-10 Lung Chuan Celadon

### **Ingredients**

Whiting 19.0%

Custer feldspar 45.5%

EPK 10.0%

Silica 25.5%

### **Additives**

Red iron oxide 1.0%

# Glaze Recipe 14: Cone 10 Moon Celadon

### **Ingredients**

Whiting 16.2%

Kona F-4 feldspar 50.5%

Silica 33.3%

### **Additives**

Bentonite 1.0%

Barnard clay 5.5%

# Glaze Recipe 15: Cone 6 Eggshell

### **Ingredients**

Whiting	9.5%
Ferro frit 3124	44.5%
Custer feldspar	20.0%
EPK	5.0%
Silica	8.0%

### **Additives**

Tin oxide	9.0%
Red Iron oxide	3.0%
Bentonite	7.5%

# Glaze Recipe 16: Cone 6 Shiny Clear

### **Ingredients**

Gerstley borate 50.0%

Silica 32.5%

EPK 17.5%

# Glaze Recipe 17: Titanium White Cone 10-11

### **Ingredients**

Bone ash	2.04%
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Talc 7.14%

Whiting 19.39%

Custer feldspar 32.65%

EPK 9.19%

Silica 29.59%

### **Additives**

Titanium oxide 3.06%

# Glaze Recipe 1: Green

### **Ingredients**

Whiting 34%

Custer feldspar 46%

EPK 20%

### **Additives**

Copper carbonate 5%

# Glaze Recipe 18: Cone 10 Mino Shino

### **Ingredients**

Nepheline syenite 60%

Spodumene 10%

Alumina hydrate 30%

### **Additives**

Bentonite 4%

# Glaze Recipe 19: Cone 6 Lichen Glaze

### **Ingredients**

Magnesium carbonate 25%

Nepheline syenite 70%

OM-4 ball clay 5%

### **Additives**

Zircopax 5%

# Glaze Recipe 20: Cone 10 Peach Shino

### **Ingredients**

Spodumene 30%

Nepheline syenite 39%

Ball clay 17%

EPK 4%

# Glaze Recipe 21: Cone 6 Pete Pinnell Glaze

### **Ingredients**

Lithium carbonate	1%
Nepheline syenite	60%
Strontium carbonate	20%
OM-4 ball clay	10%
Silica	9%

### **Additives**

Titanium dioxide	5%
Silicon carbide	2.5%

# Glaze Recipe 22: Cone 6-7 Turquoise

### **Ingredients**

	Barium	carbonate	23.53%
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Lithium carbonate 4.90%

Nepheline syenite 58.82%

Grolleg kaolin 5.89%

Silica 6.86%

### **Additives**

Copper carbonate 2.94%

# Glaze Recipe 1: Green

### **Ingredients**

Whiting 34%

Custer feldspar 46%

EPK 20%

### **Additives**

Copper carbonate 5%

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