

Soda Kiln Glazing July 2020

Glazing for the Soda Kiln is slightly different than glazing for the regular kiln. We find that some of our regular glazes work well in the Soda Kiln and give some enhanced results. This is due to the introduction of Soda and a small amount of salt at the end of the firing. We have found that the optimal time to do this is when Cone 9 starts to soften. Then we introduce the soda mixture consisting of sawdust, soda and salt in specific proportions, wrapped in a burrito like arrangement of damp newspaper placed on a piece of angle iron and slid into the kiln through two ports constructed for the purpose.

The chemical changes that this encourages gives us some wonderful effects.

We have found that we like the results on white stoneware, grogged our not and porcelain much better than on the regular stoneware bodies which become very dark. We try to keep the kiln in Oxidation through the firing, but sometimes are not as successful as we would like in this respect.

The Soda kiln has two sections, a set of shelves the back of the kiln...which get differing amounts of soda interaction. These shelves are where we put glazed pots where the owners want a bit less Soda involvement, and where we put tall and slightly unstable pots....as unlike the car portion of the kiln, this part does not have to go in and out. We feel less concerned about a very tall shelf becoming unstable as it might on the car portion as it is wheeled in and out. The Car also has a stack of shelves on it. When stacking the car portion, it is necessary to check continuously that the shelves are positioned such that they will not hit the bag walls until such height as the stack of shelves clears the bricks in the bag walls in the interior of the kiln. We have some shorter shelves that we reserve for this portion of the stack.

The Soda glazes are kept under the north table in the glaze room. There are some test tiles to look at on the south wall right hand side of the glaze room.

white salt, yellow salt, green salt..the latter two are pale in color. And white is white They benefit from a lot of soda in the kiln - the shelves on the car portion of the stacks. They look nice with some darker soda glazes as decoration on top of an initial coat of glaze. I have found that I prefer to use them on the outside of functional pots, and use some other glaze as a liner glaze. If you beat eggs in a bowl with these three glazes, it will leave marks in the glaze - it is not as hard a glaze as a shiny glaze, but it is delicate and beautiful. It is between a full shiny glaze and a Matt glaze. It tends to thicken as it sits in the bucket and you may need to remove some of it and thin it some, glaze your pot, put any leftover glaze back into the bucket. It can be dipped, poured or sprayed.

Hamada green. It is a pretty Matt glaze. It looks good with black slip decoration and some other glazes look good on it too. It can be dipped, poured, or sprayed. It is a HIGH COPPER GLAZE and it and may only be used on THE OUTSIDE OF FUNCTIONAL POTS OR ANY POT THAT MIGHT BE CONSTRUED AS ABLE TO HAVE FOOD IN IT,

Robs Green. This is a shiny green glaze. It is pretty, will show off slip trailing. It is a HIGH COPPER GLAZE use on the outside of a functional pot. It can be used on top of the Yellow, Green and White salt to create interesting effects. Probably on other glazes as well. But it will be likely to run or cause running if applied too thickly. If you put it on top of other glazes, try putting it on the top portion of the piece and check how much it runs in combination with what ever glaze you use it with to judge this.

Pete's Weathered Bronze is a pretty turquoise glaze. It is also a HIGH COPPER GLAZE outside only. Wenfen says she prefers it to be thicker, Barb has had it run when thick in a high soda area of the kiln, Deb uses it a lot too. Experiment with it to discover how thick works for you.

PV liner is just that a liner glaze - clear - for the interior of a piece when you want to use one of those glazes that can't be used with food. It too thickens as it sits and may need to be thinned. I thin an amount that I will need for the particular pots I am glazing and then pour the rest back when I am done.

There are some slips specific to the soda kiln: Gail Nichols slip, Kathy Jefferson slip, White crackle slip, iridescent slip. The first two give a nice orange color slightly different from one another.

These need to be applied thinly - so the slip is like skim milk..if too thick they will peel off. The exception is the White crackle slip which crackles best when it is freshly made, but can be quite nice even if it has been sitting a while. The first two become a beautiful orange in the kiln, You can put them on your pot, wax over them creating a design and then dip the pot in a glaze or just use several slips with a few brush marks of glaze as decoration, creating a dry surface. I have liked this with a liner glaze on the inside of functional items such as tumblers and mugs.

Of our regular slips, the only one that is good in the Soda kiln is Black Slip

The following glazes are glazes which are on the Cone 10 reduction shelves and which do different things in Soda or are useful liner glazes in soda:

Shige -it is a good liner glaze, it is also quite different when hit with the soda - getting gold flecks, or if it gets a lot of soda a brilliant blue. It is nice even if it is just itself - black if placed against a portion of the pot treated with slip and waxed so no glaze adhered - and you get an orange and black contrast. Dependable.

Tenmoku - can be a good liner glaze and on a white bodied pot in the soda can develop some other color. It is also good with orange slip as a contrast.

Shino; any of the shino glazes will work in soda and make good liner glazes. They do not develop the carbon trapping because we attempt to fire in oxidation but you can use them on a functional piece, and use most of the other glazes on top of them to create decorations and add color. They will be hard and not scratch when silverware is moved across the surface. They stay put and don't run.

Watercolor green - it was developed by Stephen Hill as an accent glaze. It can deliver some beautiful turquoise color, shiny if a bit more is applied. It wants to run so use it at the top of your pot. He developed it to run. It is HIGH COPPER so do not use on food surfaces.

Petes' Barium Matt and Pete's Barium Green and Silverton - can all be interesting on the exterior of pots. They will be Matt almost crystalline. HIGH BARIUM AND COPPER no food surfaces. Black slip will work on them.

Reitz Green can be interesting in Soda and develop differently than it does in the reduction kiln,

The Elaine Coleman celadons will not look different in Soda, but can be used as liner glazes to good effect. They will not change because the color in them is from Mason Stains. Regular Celadon is not good in the soda kiln.

Yellow Salt is a Matt yellow it is very nice in soda - on porcelain it can be a much softer yellow than it is in reduction. It can be tamed with some yellow salt as well and have a variety of yellow tones on white stoneware. I put a liner glaze inside a mug or tumbler and on the rim as I do not like the feel of this glaze on my lip or I put a liner glaze and dip the top in Yellow Salt to get a nicer mouth feel.

Amber Celedon was originally a soda glaze and we allow everyone to use it now...but it runs a lot so do not apply thickly. It is pretty and can get gold flecks in Soda. With white clay bodies you can see the nuances of marks and differences in thickness of the glaze as it pools as well.

Blue Lagoon was originally used in the Soda kiln and gives a Matt blue surface. It is a strong color, can be used quite thinly or brushed over shino ..it is Matt. It is food safe.

Laguna Green is also good in Soda and can be combined with other glazes and slips. It is a copper glaze but is not so high in copper that it is a problem with food so far. If the kiln reduces it can develop some pinkish tones.

Segar Blue can be pretty but tends to pinhole in soda - so we do not use it as much as we did to begin with.

I hope this helps you to think about glazing. The other glazes in the regular cone 10 group have not proved to be as interesting in soda.

When you are finished glazing you have to wad your pots. We keep the wadding in the same place as the glazes. You need to make small maybe 1/4 inch balls and glue them with Elmer's to the bottom of your pot - three to four on the bottom of your pot. Make sure they are not going to get stuck to the glaze or they will be very hard to remove post firing. When you turn your pot over make sure your pot is stable, place it on a piece of newspaper on a tray (if you have a number of pieces) or on the soda cart on a piece of newspaper. If the glue should run, it will glue your pot to the shelf making it very hard to remove. If it gets glued to a piece of newspaper the stacker can easily tear off the newspaper. If your pot is larger and/or heavier, you will have to make bigger wads for it. The glue holds the wads to the pot so the stackers do not have to put each pot on wads and it is easier to stack. The firing will remove the glue and it will be easy to remove the wads. They can be reused, but we do not often do this as there are subtle leveling that occurs when the pot is placed right side up and it is hard to replicate with fired wads.

You must measure your pots with the wads on them. If you prefer more or less soda you can note this on the slip...you can put all of the information about similarly glazed pots on one sheet of paper. If you have a preference of kiln placement you can suggest, but it is not a guarantee of placement. So if you have glazed a piece and want light soda to hit the pot, note that and stackers will do their best,..If you have very tall pots, they will go inside back top of the kiln so glaze with that in mind. If you want a few slips for a more dry effect with some accents of glaze and want lots of soda let us know that and we will do our best to put your pot in a place where it is more likely to get more soda. As we will have fewer people involved with a stack to maintain social distancing, we will need more information from you to be able to try to stack with your desires in mind.

This kiln is stacked more loosely than the Cone 10 reduction kiln so that the effects of the soda can move through the kiln.

It is stacked in the afternoon so that we can light it after stacking, and it is turned up in that evening and then again the following morning...It usually goes until between 6 and 8 at night.

