

Questions and Answers week 2 (Kiln loading)

Q:

I glazed this morning early. I put plastic etc. and put a small fan on them. I have checked them periodically today to move the plastic and I don't see any lines. Does it take longer usually? I need to fire tomorrow so I thought the fan would accelerate the process. Maybe it ruined the effect?

A:

The fan should accelerate the process. What kind of climate do you live in. I happen to be in Denver where the air is very dry, a humid climate may take longer. If your glaze was on the thin side that could affect it too.

Q:

Question for Nan Rothwell from student: Have you tried sponging or brushing your ash wash on before? How about the toothbrush method (dip the brush, rub your finger over it to do small spots of spray)? You said a light hand was needed, so I'll keep that in mind. I dread getting out the air compressor and my sprayers. Maybe I'll try the mouth sprayer, since my pots are small. Could all of you please list your variable ingredients (your spar, your Albany substitute) when you post your results?

One test I'm going to try to increase carbon trapping is to take about a cup of each glaze and add additional sodium -- table salt, maybe two tablespoons per cup -- and then do sponge-prints on top of the various Malcolm's. We'll see how that goes.

2,000 grams looks really skimpy for the ten pots in each of my "boxes", so I'm mixing all the rest at 4,000 grams.

A: (From Nan)

Yes, Sylvia's ash mixture works well brushed on, sprayed with mouth sprayer, and splashed.

As for adding extra sodium, I would be wary of using NaCl (table salt) into a glaze. Test by all means but be sure to put your tests on something that will keep your kiln shelves safe. I have tried a number of ways of adding salt that didn't work. Be aware that it may fume things around it.

I'm going to try adding extra soda ash to my older buckets of shino before I use them again. My theory being that the soda ash concentration has gone down in relation to the other ingredients in the bucket because it's soluble and gets carried away in the water. Everything else is basically just suspended in water, but it dissolves.

Nan's Ash mix recipe:

The ash mix I use is a recipe from my friend Sylvia Dales -- a potter in Sudbury, Suffolk, UK. (She and I went to Harrow pottery school together 1970-72) It's 70% Potash Feldspar and 30% wood ash, plus 2% bentonite. To keep it from clogging my sprayer, I put the mix through a very fine sieve, which removes a portion of the wood ash sol-ids, but I am guessing it's the solubles in the wood ash that matter here. I suspect it's best to get the ash mixture onto the pots quickly after glazing them instead of after the sodium has migrated to the surface, but I'm really not sure of that. It's just the way I normally do it, not timing I have studied.

Q:

- 1) You're using the standard Malcolm Davis recipe as quoted in a variety of sources out there on the interwebs and on paper, but some of them indicate optional small additions of Red Art (or Barnard Slip). Have you tried this and if so, what are your thoughts?
- 2) One source I was reading (Britt book on high fire glazes) suggested that more in-tense black trapping is a function of more soda ash in the recipe. This recipe has 17% while other recipes found around hither and yon have as low as 8% soda ash. Other than the obvious that you are getting extraordinary results with this recipe, do you have any thoughts about varying the amount of soda ash?
- 3) What can you tell us about "leopard spot" shino?

A:

I have not tried less Red Art but I recommend it for those using stoneware which al-ready has iron in the clay body and affects the glaze. Also, if you want less of the orange color on porcelain, you can reduce the amount of Red Art (test first before mixing a large quantity).

Yes, this recipe is at the high end for the amount of Soda Ash it uses. I have tested a lot of shino glazes and I like the way this turns out. Another shino glaze that gets nice carbon trapping is Dresang Shino. It has less Soda Ash added and still carbon traps nicely. I'll look at the glaze recipes tomorrow at the studio to compare them. I can post the recipe if anyone would like it.

Leopard spot shino is a whole different animal if you are referring to the one that Tom Coleman and Amy Kline use. You do not heavily reduce it because the carbon is included in the glaze. Some of the ingredients come from Australia and the glaze is quite expensive. Kline Glaze Service sells the dry glaze and I have not seen a recipe, so I can't tell you what is in it. Tom Coleman will be doing a workshop at our guild in the Denver area next spring (2019) and will be showing students how to fire this glaze and other glazes they use if you are interested. We will soon have information out on the workshop.

Q:

Can you comment on how you pack your kiln for best results? I have been offered various suggestions. For example, to you leave a lot of space in between, do you pack tightly, do you vary heights for movement, etc.

A:

I have best results in my kiln with a tighter packed kiln. I try to put pots of similar heights on each shelf and the kiln shelf about an inch above the pots. About 1/2 inch between pots. Also at the top of the kiln I try to get pots within a few inches from the top. Having pots too close to the top or leaving a lot of space at the top will affect the air flow (flame path). A few times I've put some tall stilts in just to get the height I wanted. If you don't have enough pots to pack the whole kiln in this way, it's better to stack the whole kiln a bit looser rather than have part stacked tightly and the rest packed loosely. Also, I stagger shelves between front and back, trying not to have any front and back shelves at the same level.

Q:

Can you say more about how having pots too close to the top affects air flow?

A:

There's needs to be a flame path over the top of the kiln, if pots are too close it blocks this path. A few pots that are close is ok, just make sure that they are spaced out to allow the flame to travel around them. Also have pots front and back top shelves as even as possible. If there is a lot more space above the pots on one and the other is much closer to the top, the flame is going to follow the path of least resistance and likely to have uneven reduction.

Q:

To use the space in the kiln most efficiently, we typically load flat things (platters and plates) together on a shelf with short posts. This works well for standard reduction. However, there is very little carbon trapping on these items. Can you give me some suggestions that increase the trapping on flat surfaces?

A:

Make sure you leave about an inch of space above the pots and the kiln shelf. If the kiln shelf is too close to the pots it does not leave enough space for air flow.

Q:

Do you use a known specific gravity for your shino glaze or know from experience how thick it should be?

Do you clean the wood ash that you sprinkled on your pieces? Sieve it, wash it in any way?

What type of clay do you use? Porcelain? What kind?

Do you ever put extra soda ash on pieces? Spray it on?

A:

The shino is between 42 and 44 on the hydrometer, I will check when I go to the studio next, probably Monday.

The Ash I used, was mesquite ash from Kline Glaze Service. I'm pretty sure it's been washed and sieved. You can find it on the internet under Kline Glaze Service.

I use Domestic Porcelain sold by Continental Clay and also Coleman Porcelain sold by Aardvark. I often mix the two clays together. If I'm using a celadon glaze, I prefer the whiter Coleman Porcelain.

I have sometimes sprinkled a bit of Soda Ash on a pot.

Spraying in my opinion doesn't work as well as dipping. But if you have large pots or pots that are awkward to dip give it a try.