

# Crystalline Matte Glazes

STORY, ART, & PHOTOS BY BRIAN GEIER



**Pictured, this page:** Teapot, 7½" x 6" x 5"  
**Opposite page, from top:** Bottle, 7½" x 4" x 4"  
Yunomi, 3½" x 3" x 3". All works were made by  
Brian Geier and fired to cone 10 in oxidation.



The focus of my pottery is to make decorative and functional wheel-thrown forms with matte crystalline glazes. I prefer the characteristics of matte glazes because the surface is smooth to the touch, and they are more subtle in appearance than glossy glazes. I also like smaller crystals and subtle variations in the background color of the piece. I think that when combined, these features make the piece feel more organic and natural.

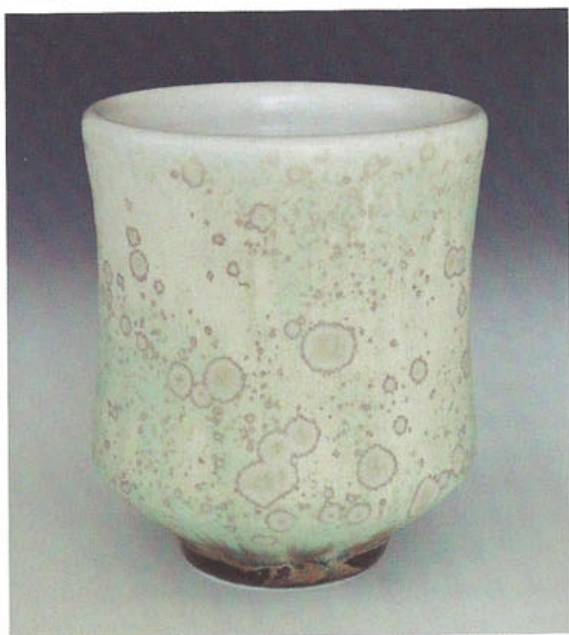
One source of inspiration for these glazes is from the Ocean Jasper mineral. It is a member of the quartz family, and it forms spheres of small crystals throughout the piece. When it is cut and polished, it can look just like a great crystalline glaze. Also like the glaze, no two pieces are ever the same.

I took my first ceramics class in middle school. We only briefly used a wheel, but I had an interest in wheel-thrown pottery from that point on. My next pottery class

was not until college. That is when I really got hooked. Although I did not major in ceramics, I took a pottery class every semester that I attended college.

All of my pieces are thrown porcelain. The glazes are brushed on the pieces or poured. I also make rings and glaze catchers for each piece. This is because crystalline glazes run at high temperatures.

It is important to make sure that the rings fit exactly to the bottom of the piece. Both surfaces must also be completely flat. I attach the ring to the pot with a mixture of EPK and alumina. I also make sure to glaze over the seam between the pot and the ring. This allows the glaze to flow more easily across the seam during the firing. This allows for an easier separation afterwards. After the firing, I tap the ring with a hammer until it separates. I then use a Dremel tool with a diamond disc to grind the bottom of the piece smooth.



My work is single-fired to cone 10 in an electric kiln. Starting out in ceramics, everything I made was bisque-fired. It was not until I took a workshop from Steven Hill that I realized that single firing was a good option for me. Since then, I have only single fired my work.

I wait until my pieces are bone-dry, then I glaze them by brushing or pouring. After that, I let the glazed pots dry for several days to make sure the moisture evaporates as much as possible. My firing schedule is very simple. I still use an old manual electric L&L kiln that I inherited from my grandmother, who used to make porcelain dolls. It is probably about 25 years old now and still

going strong, although I do have to replace the elements often. I hold the temperature at about 175° Fahrenheit for an hour. Then I turn the kiln to medium for about a half hour, until the temperature reaches about 300°-400° F. Following that, I just turn it to high until peak temperature is reached.

The speed of the temperature rise slows gradually as the kiln reaches cone 10. It starts out at about 500° per hour, and then slows to about 100° per hour for the final part of the firing. Then I turn off the kiln until the temperature drops to 2000° F, and hold it there for about 90 minutes. After that I

shut the power off to let it cool naturally.

It took me a long time to develop a matte crystalline glaze that I liked. Once I did, I learned a lot more about the glaze by working with it over and over again. You start to learn how a particular glaze behaves under different circumstances, and how to get the best results from it. My favorite thing about crystalline glaze firing is that it is always exciting to open the kiln. Every piece comes out differently, and you never know what you will get. ©

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