

# COMMON QUESTIONS ABOUT USING MASON STAINS®

## **Q. Why do I not get good pinks or crimsons in my glazes at cone 2, 5, 6, 10, etc?**

A. Mason Stains'® chrome-tin pink series, #6000 to #6006, are stable from Cone 06 (normal "low" temperature) to Cone 12 (normal "high" temperature). This type of pigment requires the correct glaze chemistry in all temperature ranges, in order to maximize the "color value". High calcium content is most important, and zinc & magnesia must be low to zero. Boron should not be too high. A major complication is that these rules do not necessarily apply when "fast-firing" techniques are used. Second, these pigments need an oxidizing atmosphere throughout the firing cycle.

## **Q. When I use black stains to make gray shades they turn green/brown/blue/pink, etc. Why are they not simply gray?**

A. Do not use black stains to make gray shades by using small amounts in the glaze. Blacks are made of combinations of cobalt, iron, nickel, chromium, manganese, etc., and if low percentages are used the resulting color is often that of the predominant oxide in any particular black pigment. Again, care should be taken to use the correct glaze chemistry to avoid combinations that create color problems. It is better to use the gray pigments that we offer.

## **Q. Why does my green glaze turn brown or has brown edges?**

A. This is usually due to the presence of zinc. Remove any zinc from the formula, because it turns chromium brown in most situations. Additional calcium may help.

## **Q. Why does my glaze appear "milky"?**

A. Too much boron in the frit or glaze formula, under-firing, or the presence of opacifier in amounts greater than 2%.

## **Q. Why is my purple/lilac/violet glaze turning blue?**

A. Some of these pigments are made of chrome-tin pink and cobalt. Sufficient calcium is needed to support the "red" side of the mixture.

## **Q. How do I make a nice red-brown using your regular brown pigments?**

A. The base glaze should contain from 3-5% zinc. This supports the red side of the stain.

## **Q. My blue under-glaze runs, creating a "fuzzy" appearance. How can I prevent this?**

A. Cobalt silicate is very soluble in the glaze, so it is better to use cobalt aluminate, or a combination of both. Too high a temperature can also cause this effect.

## **Q. Can I mix pigments to make my own color palette?**

A. Yes, in most instances, but some stains are not compatible with others. We always encourage you to experiment and test, first with small quantities, to achieve the results you want.

## **Q. Do your pigments contain lead compounds?**

A. No. Lead compounds are not used in Mason Stains® pigments.

## **Q. What are "encapsulated" pigments? Are they safe to use?**

A. Encapsulation is a special, patented, manufacturing process designed to incorporate certain metallic oxides into the crystals of zirconium oxide. They are also referred to as "inclusion" pigments. They are safe to use, and are now widely used in ceramic manufacture around the world. Obviously, as with all finely dispersed powders, care should be taken to keep operations as dust-free as possible.

*These questions and answers are courtesy of Mason Stains® by Mason Color Works website FAQ section.*

<http://www.georgies.com>  
756 NE Lombard St • Portland OR 97211 • 503.283.1353 • 800.999.2529  
1471 Railroad Blvd #9 • Eugene OR 97402 • 541.338.7654 • 866.234.2529

**Georgies**  
CERAMIC & CLAY CO.