

Q. Why do I not get good pinks or crimsons at Cone 06/2/5/10, etc.?

A. Mason's 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. (See Q. #1). 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. However, some stains are incompatible with others, so if you do not achieve the result you want you should phone the Mason laboratory for further information.

Q. Do your pigments contain lead compounds?

A. No. Lead compounds are not used in Mason 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.

Q. Can you help me with technical problems, glaze formulas, etc?

A. Yes, most certainly. Our technical support staff will offer advice on all ceramic manufacturing problems, and will be happy to supply body, glaze and engobe formulas on request. Obviously, no guarantees or warranties are expressed with such information since all ceramic operations differ in crucial ways, but we will try to help you with your difficult problems.

Q. Where can I find Material Saftey Data Sheets for the products you offer? A. We now offer all of our MSDSs online for download. You can find them <u>here.</u>

Didn't find an answer here? Contact Technical Support Here.

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