



Perfect Porcelain Painting By Catherine Mather



Painting on porcelain, whether it is a piece of fine dinnerware, a vase or a doll head, is a thousand-year-old technique that creates a delicate and durable finish. Although the process has been refined over time, it still requires skill to create the pigment colors and to apply and bond the color onto the porcelain surface.

The paint or flux and pigment mix is ground to a fine powder and then mixed with a lubricant to form a paste, which creates a soft blush effect when applied lightly and produces a fine line when more fluid is added. The color is bonded onto the porcelain as it is fired in a kiln. The heat may reach as high as 800 degrees Celsius (more than 1,400 degrees Fahrenheit), melting the flux and bonding it to the porcelain. Many firings are required to build the color intensity, starting with the lightest coloring and gradually building up the desired color detail.

One of the most interesting parts of designing a doll is creating the face paint detail. Once the doll head has been fired to bisque and finely sanded to give the porcelain an ultra-smooth finish, a layer of base color wash is applied to the head. This is the most important paint layer, as it creates the surface for future paint detail.

When I sculpt a new doll, I work from a reference photo of my chosen subject, so it's only natural to study a portrait photo to create a realistically painted head. Irene, in my mind, was always going to be a pale blond doll, so I chose a palette of golden browns, pinkreds for the lips and over wash, tones of dark blue, blue-green and green for the irises, and a mix of white, black, fawn and mauve for highlights and accents. I use a number of pre-ground commercial paints and a glycerin-based painting medium. I test-fire all colors before working on my finished doll to ensure a true fired color and to make certain there are no adverse reactions if brands are mixed.

First Firing

For applying the base wash, I prefer to add additional flux in my color wash. This will add extra sheen to the

Limited 15 sculpts, each in a one-of-a-kind outfit, this 181/2-inch Irene wears a soft peach dress with pink lace and beaded satin, along with a silk tulle and lace shawl with roses and beading in rose pinks and blues. She retails for \$1,560 and is available through The Dollery (dollery.com).



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Apply the base wash with a sponge.



Apply a mix of fawn and mauve paint to create shadow detailing on the face.

base coat when fired. Remove any color in the eye areas and repaint with white gloss. This first firing is the highest firing the head will receive and is often higher than the manufacturer-recommended fire temperature for china paint.

Second Firing

Start with the eyes, as they have the

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most depth of color. Paint a circular iris, with the top hidden under the lid and the lower edge a few millimeters away from the bottom of the eye. I apply light blue and blend the color upward and toward the top, giving it darker shading at the top with less color depth at the bottom.

For the top edge of the eye rim, apply a light coat of black, making it

wider at the outside edge. At the lower edge rim, smudge a soft line of black paint wider at the outer edge; this is the eyeliner. Paint a fine red watery line along the eyeball's lower edge. Add a pale spot of red paint at the tear duct. Paint the underbrow a golden brown shadow.

Working down the face, detail the nose holes with a touch of red, blending well. Paint the mouth soft red, keeping the fullest part of the lip very light; this simulates the way light shines on the bottom lip. Lightly blush the cheeks (heavier at the cheek apple) and blend away well. Fire to the recommended paint temperature.

Third Firing

To add more detail to the eye area, paint the iris with a pale outer band of blue-green. Add a grain of black to this paint and darken the outer edge of the iris. Paint the black pupil (this will be slightly above center).

Add green eye shadow to the eye area, dense at the outer and inner lid area, and blend to the center. In the eyelid crease, blend a mix of green and fawn paint to define this line. Apply a second coat of black on the top edge of the eye rim. Paint a fine detail line on the lower edge, leaving a space between the upper lid and continuing around the rim, ending in a soft, diffused edge.

Stroke fine eyebrow hairs using a mixture of darker and lighter shades of golden brown. Recoat the lips at the center only, blending well. Mix fawn and a few grains of mauve to create the color for shadow detailing; apply lightly to the nose crease, in between the nose and lips, to the inner ear folds and to the inside of the nose bridge. Accentuate between the lower lip and chin. Blend in the paint well. Fire to the recommended paint temperature.

I complete two or three firings, building up the iris coloring in this way, adding paint until it has a realistic depth of color. For the last firing, I complete the eyes, lips and brow detail.

Last Firing

Define the eyelid fold with a strong line of green and fawn darkened with

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a grain of black. Highlight the eye with a white dot of paint positioned at 2 o'clock in each eye, just touching the pupil; this gives the illusion of light glinting on a moist eyeball. Add a stronger red line to the outer eyeball edge at the bottom outer corner. Darken the tear duct.

Mix a grain of black in golden brown and highlight the brow with darker strokes.

Darken the center of the mouth and the outside edges. This will create a plump-looking lip.

Lightly blush the cheeks and add any additional fawn shadowing detail if needed. I prefer to fire this last painting a few degrees lower than the previous firings; this will help to keep the red intensity of the paint from fading. \rightarrow

The National Institute of American Doll Artists (NIADA) is a worldwide organization of artists, supportive patrons and friends. Visit niada.org for more information. More of Catherine Mather's work can be seen at catherine matherdolls.com.



Build the cheek color intensity.



Each layer of color enhances the face. By the third firing, the overall look of the face is established.



Shown here is the finished Irene head.