

Glass Painting

Knowledge of glass painting can add a new dimension to your glasswork. It provides you with the ability to add lines, create texture and shading. Although you will want to learn more about this field, the following information will provide you with a brief review of glass painting.

Recommended tools for beginners:

For Mixing:

Large ground glass slab – 6” x 6”

Glass Muller – 2” or 3”

Steel Spatula – 4”

Glass water jar

Disposable respirator or dust mask

Latex Gloves

Gum Arabic Powder

Brushes:

Tracers – Size 3 or Size 5 (Series 3 or Series 30)

Applicators – Extra Short Square Shaders – Size 6 or Size 8 (Series 2X)

Matting Brush – Camel Hair matting brush – Size 1½” (Series 18)

Tinting Brush – Size ½” or 1” (Series 16)

Student Badger Blender – Size 3” (Series 31S)

Stippler – Fitch deer foot, Size 4 or Size 6 (Series 19A)

Getting Started

Most glass paints are sold in a powder form, made up of vitreous material that fuses to the glass when the painted pieces are fired to proper temperatures in a kiln or lehr. Most glass paints contain lead so observe normal safety precautions.

Mixing:

Powdered glass enamels are to be mixed with water and a binding agent such as gum arabic powder, which is a water-soluble gum obtained from acacia trees. A painting medium may be used in place of water and binding agent. The choice of mixing liquids and binders depends on the painting technique preferred.

Steps for mixing: Water and Gum Arabic Technique

A) Glass Stainers’ Color

- 1) Place your powdered color on your ground glass slab
- 2) Using a palette knife or spatula flatten the color to 1/8” thickness.

B) Gum Arabic Powder

- 1) Using your clean palette knife, collect a small amount of gum arabic powder.
- 2) Using your finger, tap the gum arabic powder to sprinkle enough gum arabic onto the powdered color to look like freshly fallen snow.
- 3) Now mix your dry color with the gum arabic powder thoroughly.

C) Water – Cool drinking water

- 1) Add water to desired consistency, mixing thoroughly.
- 2) Mixture will be smooth and thick (toothpaste consistency).

If more water or color is needed you may add it directly to the mixture. If more gum Arabic is needed, you must mix it with water separate from the mixture to avoid clumping. It is better to start with less gum arabic and add it gradually if needed.

White vinegar can be used in place of the water for tracing. This creates a water-repelled trace to save on firings. After the trace has been allowed to dry to a hard finish, you may apply matting, using the water and gum arabic method, without damaging your trace work.

Steps for mixing: Painting Medium Technique

A) Glass Stainers' Color – We recommend mixing three parts color to one part medium by weight.

- 1) Place your powdered color on your ground glass slab.
- 2) Add the recommended amount of medium.
- 3) Mix thoroughly.
- 4) Adjust if necessary.

It is a good idea to make note of your mixing techniques to maintain consistent fired results.

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Tracing:

Usually the first step in painting on glass. Tracing can be done using a cartoon or free handed. Tracing colors can be mixed with water and gum arabic, vinegar and gum arabic, outlining medium or branding medium. The flow of the paint is essential when tracing. Firing after trace may be necessary, depending on your technique.

Suggested colors for Tracing:

1059 – Stencil Black
DE401 – Tracing Black
DE458 – Tracing Black Best
1110 – Bistre Brown #7
DE402 – Bistre Brown
1134 – Tracing Brown #1

DF476 – Flesh Red

Matting:

The controlling factor is in the windows translucency, dimensionality, contrast, and balance. Creativity is the key to matting. You need not follow any prescribed method or set of rules, but utilize whatever procedures help to achieve your intended effect. There are several application methods for matting.

- 1) Flat Matt – Basic method usually mixed with water and gum arabic. Apply paint to desired density and as even as possible. Blend immediately.
- 2) Stippled Matt – Applied the same as a flat matt. After blending, when you have achieved a smooth surface, and the paint is still wet, the glass is dabbed with the same blender brush. The blender should be held perpendicular to the glass and dabbed lightly only allowing the hairs of the brushes to penetrate the paint allowing light to come through.
- 3) Shaded Matt – After an evenly distributed layer of matting color has been applied, using your blender at an angle with a sweeping motion, brush the paint in the direction of the area you want darker. You will have to repeat this stroke several times to achieve the intended effect. You may also have to use your fingers or stiffer scrubs to achieve a desired shape.

Suggested colors for Matting:

1065 – Universal Black
DE401 – Tracing Black
1110 – Bistre Brown
DE402 – Bistre Brown
1109 – Ancient Brown
DE405 – Ancient Brown
1140A – Vinegar Tracing Brown
DF476 – Flesh Red
1333 – Red for Flesh
1220C – Grey Green Matting
1203A – Black Green Dark
1205A – Black Green Grisaille

Enameling:

Usually the last step in painting on glass. Enamels are usually applied to the back of the glass so that it will not disturb the highlighting and tracing. Enamels should be fired last.

Firing:

For permanent adhesion to glass, all glass stainers' colors must be fired in a kiln. Correctly fired in, the colors cannot be removed by scratching, cleaning, or washing.

Built for ceramics and metal enameling, the electric kiln is adaptable for firing painted glass and is used by many artists. We suggest a front-loading electric kiln for easy

accessibility. Dimensions 16” wide by 16” deep should be adequate for most painted glass.

In order to fire paints directly, you must know the specific firing temperatures for the colors you are using. Some enamels fire at a lower temperature (1050-1080°F). Glass Stainers’ colors fire higher (1200-1250°F).

Please refer to the following references for more technical information on glass painting:

Elskus, Albinus – “The Art of Painting on Glass” – Scribners

Maddy Dorothy L. – “Silver Staining” – Stained Glass Magazine – Fall, 1984

Millard, Richard & Isenberg,