



# UGC Enamels

Unique Glass Colours (UGC) make exquisite enamels and paints for glass fusing artists, alongside the magical MUD for amazing hand crafted decorations.

UGC products will allow you to create beautiful works of art, both kiln fired and non-fired, on many different surfaces.

UGC currently has four kiln fired color lines that are for commercial applications, hobbyists and artisans;

- Original
- NT
- Artisan
- Accent

The colors kiln fire in the 773°C to 843°C firing range. Surfaces include - float glass, porcelain, terracotta, recycled glass, specialty glass, pre-fired pottery and any glass that can fire within that range. The colors can fire to much hotter temperatures when used on surfaces other than glass.



# UGC NT Colours

NT Colours come in powder form, are non-toxic and food safe and fire to a rich, glossy vibrant colour.

The NT line is mixed with UGC Medium to the consistency of melted ice cream and fire semi-opaque to opaque when mixed on a 1:1 ratio with UGC Medium. They can also be used in their dry form for stencilling or sifting techniques.

NT's were developed to be used on the top layer of float glass, but most fuse beautifully when fired between layers of glass.

NTs can be mixed with each other but do test the colour you have mixed to be sure it is the result you want. Mixing any of the NT colours (not the metallic's) with 1951 Brite White or 11016 Vanilla will give you an almost unlimited range of graduated colour.

## Metallic colours

The four metallic colours are 11011 White Diamond, 11012 Gold Dust, 11013 Copper Glow and 11017 Silver Sheen. The cooler these colours fire, the rougher the surface becomes. They also need to be used only on the top layer as fusing between layers takes away their metallic qualities.

## Outlines

Outline Black and Outline White come in liquid form and dry hard to allow colours to be bought right up to the line. Place the product in one of our decorator bottles with a metal tip for outlining and general line work where you want consistency, or use a brush. Outline Black and Outline White fire to a matte finish.

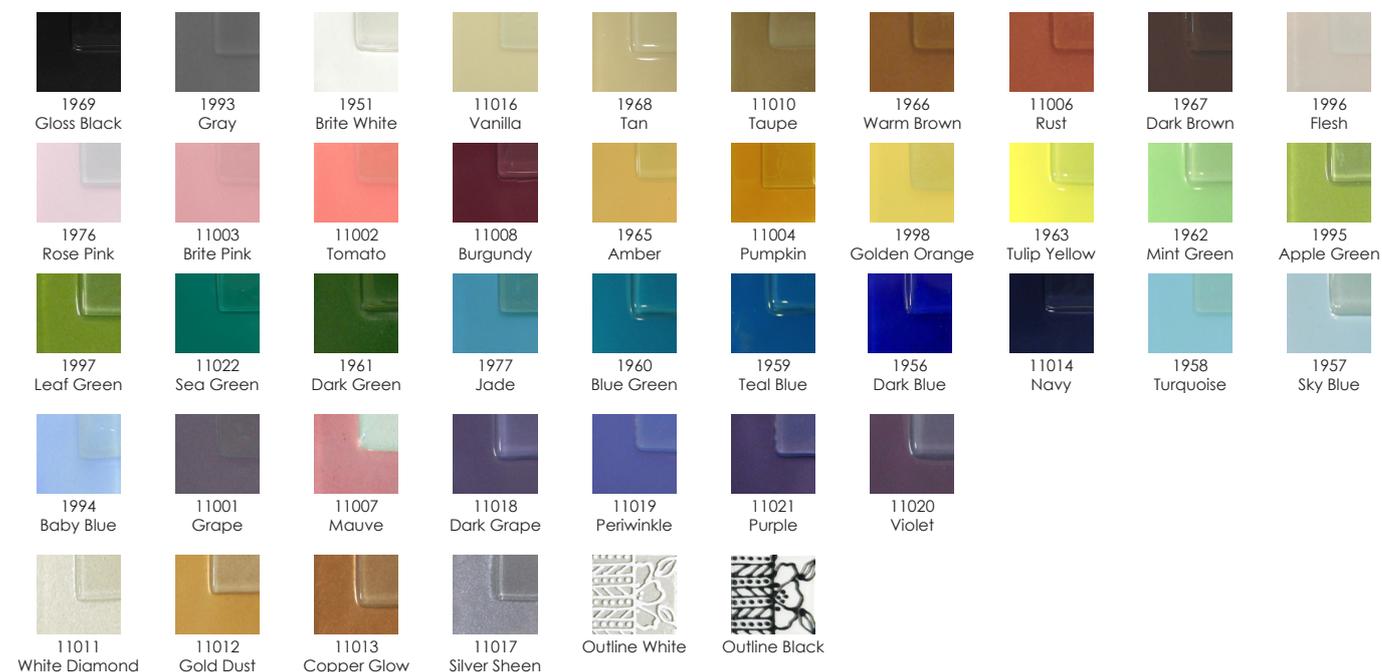
## Mixing

We recommend mixing 1/2 of a 1 oz. jar with UGC Medium, so you have powdered colour left in case you mix too thin or if you would like to use the powders for stencilling or other applications. The colours will settle in the jar so mix often during use. After being stored you will need to stir the colour FIRST before adding any liquid as our colours are all "thixotropic" meaning that the act of stirring will liquify the colour. If, after stirring, you still need them to be thinner you can add a bit more UGC Medium or water to bring them to the proper consistency.

## How to use

Colours can be brushed, sponged, airbrushed or applied with the outline bottle. When spraying, proper equipment, including a mask is necessary. When using the "Puddle, push pull" technique, select a soft brush such as a 10/0 and fill to capacity, then allow colour to flow from the brush into the area to be coloured. If applied too thinly or pulled out too far it will appear streaky or washed out when fired. Wet colour, when viewed from underneath the glass should appear opaque. For a watercolour effect using the NTs you can wet the surface of the glass (with either UGC Medium or water) before applying the colour and then, applying them in an uneven manner, letting the colours run and blend into each other. You can spritz the colour with water to get it to run more or you can add more colour.

## NT Colour range



# UGC Artisan Colours

Artisan Colours come in powder form, are lead-free and when fired between layers of glass they appear translucent and form bubbles, and when fired on the top layer of glass appear textured, opaque and glossy.

## Colour families

You can use the Artisan Colours along with the NT Colour Line BUT you CANNOT combine the two colour families to create a new colour. They are two totally different products with a different mix of ingredients. They can run into one another or be applied next to one another with no problems, let them flow into one another to create interesting effects.

## Characteristics

Each colour has its own different characteristic. Look closely at the colour chart. You can see that they all do not produce the same sized bubbles when fired between layers.

Solar Flare can sometimes have a reddish glow.

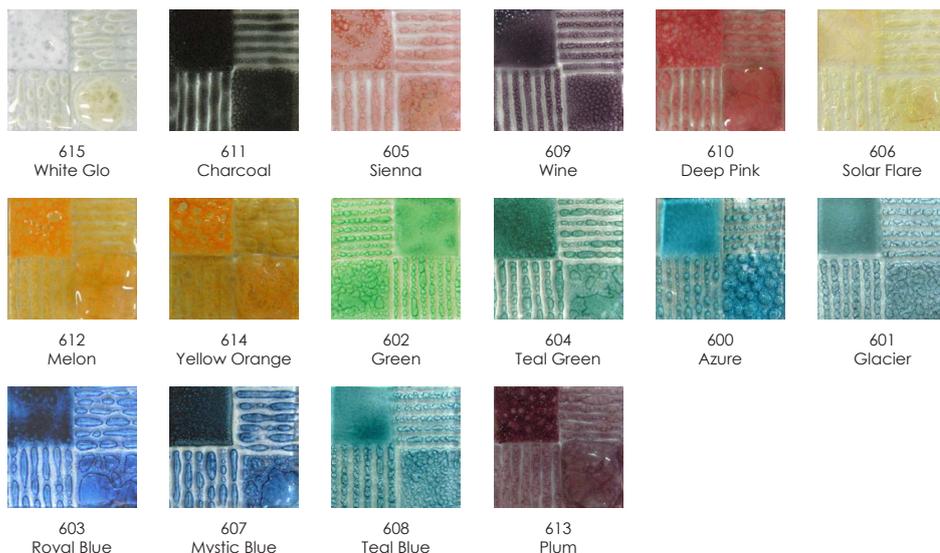
Wine and Charcoal produces the finest bubbles. However, it depends on how heavily you apply them as to the size bubble you achieve. Application Dependent! Royal Blue and Mystic Blue tend to produce the largest bubbles.

## Applying Artisan Colours

Shake the colour in the jar before adding UGC Medium to evenly disburse the ingredients. Small, gritty stuff in the colour is okay. Some will dissolve, some will not. If you don't want spots of really intense colour from the grit, pick it off the wet colour application.

You can mix these colours a bit thicker for intense colour compared with NT Colours which need to be the consistency of melted ice cream. Artisans like to be the consistency of pancake batter. Start by mixing 1 part colour to 1 part UGC Medium. If you want it thicker, add more powder; thinner - add some water. Again - Application Dependent. Do you want bigger, more intense bubbles? Mix to pancake batter. Do you want thinner, smaller bubbles with less intense colour? Mix to whole milk consistency.

## Artisan Colour range



## UGC Accents

Accents come in five metallic colours and can be fused on top of glass or in between layers.

The Accents come pre-mixed in 1/2 ounce jars so no additional medium needs to be added. They need to be shaken well and given a good stir to distribute the particles before application.

### Application

Apply with a liner brush, thinly for just a hint of sparkle or heavier for more solid coverage. Accents can be fused on top of glass or in-between layers. If used on top, excess burn off needs to be removed with water and a soft brush such as an old toothbrush or nailbrush.

The Accent metallics can be applied directly on glass, over dried NT or Artisan Colours or dropped into wet colour and allowed to disperse into the colour. Accents can be mixed with the NT Colours to create unlimited metallic colours. Experiment with the application and use of the Accent metallics to create new and "unique" effects.

### UGC Accents range



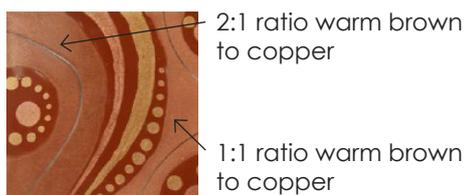
Crystal Ice

Platinum

Copper

Brass

Gold



Using 1966 Warm Brown mix with Copper Accent to create varying shades



Using 1956 Dark Blue mix with Crystal Ice Accent to create varying shades

## UGC MUD

MUD is a glass based texture medium that can air dry to a rock hard state and can also be kiln fired alone or right along with our NT and Artisan Colour lines.

MUD is available in 4oz jars only and comes in two colours - white and black. They are ready to use right out of the jar with no further preparation whether they will be kiln fired or air dried.

### Application

You can tint the White MUD using our NT Colours but note that you will only ever get a pastel colour since the White is so opaque. Its best to do the design/project in White, let dry for 24 hours and then add colour on top.

MUD is thicker than Outline Black and Outline White so can be used for outlining or drawing techniques where you want some texture and height. You can mix Black MUD and Outline Black 1:1 for outlining. The two products are compatible. Use UGC Medium IF the MUD needs to be thinned for any reason.



## UGC Medium

Medium is used to liquify our powdered colours. It is available in either 2oz or 4oz bottles.

Mix the powdered UGC colour with this Medium on a 1:1 ratio then add a drop or two of water if necessary so they are the consistency of "heavy cream" or "melted ice cream". Colours can be mixed and stored in an airtight jar. Some of the colours will settle faster than others, so all must be stirred well before use again. There is a wide variation in how the colours settle.

### Artisans

When using to create "lines" of colour with a brush, make the consistency a bit thicker so the lines of colour stay in place easier and don't spread out.

For Artisans you will notice that each colour mixes up a bit differently. Thinner application will give a more translucent colour and smaller bubble and a heavier application will have stronger colour and larger bubbles - but each colour has its own size bubbles!

### Applying colour

To apply colours for the most solid coverage - you need to "puddle, push and pull". Use a small liner brush for small areas and a small round for other areas. Pick up colour and drop a small "puddle" of colour to your surface, then "push" and "pull" the puddle to apply. Add another puddle, push and pull until you have filled your area with colour. Do not brush the colour out or paint it on unless you want streaks in your colour. A thin application will result in streaky colour after firing. You should not be able to see through the wet colour. Look at your work from underneath the glass as what you see there is how it will fire. If you make a mistake, let the colour dry and scrape off with a toothpick and brush off the chips and dust created with a soft brush and re-do the area.

### Shading or highlighting

To shade or highlight with colours, you need to "pat, wiggle and muddle" - apply colours side by side and blend by using the tip of the brush to pat or wiggle between the colours to blend. To "muddle" push the colour around with a larger brush in a more random free-flowing manner.

### For a watercolour look

Leave water in your brush so the colours become thinned as you apply them to your surface. Tilt your glass so the colours run down your glass and/or run together. Note that colours will not be as strong as extra thinning has taken place. Be careful not to thin too much or you will have weak or no colour.

When applying colour and it is "beading up" on your glass - rub over the area with a toothpick and reapply the colour. This may be caused by the surface not being properly cleaned, or oil left behind in a fingerprint.

Let colour dry completely before firing.

### Cleaning your glass before application

Make sure that your glass is clean before using your UGC Enamels. There are many ways to clean your glass, here are two UGC recommend:

Scrub both sides of the glass with a powdered abrasive cleanser and a green grit pad. Dry thoroughly. Make a brushstroke of just clean water on each side - the side that beads up most is the "tinned" side and should not be used for the colours. It won't hurt the colours, you just have to rub over the area with a wooden toothpick and the colours lay right down - it's just a nuisance to have to do that!

Use very hot water and a hard bristled scrub brush.

Do not use rubbing alcohol or glass cleaners as they may contain oils and/or silicone and will cause the colour to crawl and bead up.

## UGC Layering Mix

Layering Mix is a liquid that when added to our powdered colour lines will give you an array of different effects.

- Turn any of our enamel colours (that do not contain bits of grit) into Outline Colours
- Give texture and dimension to any of our powdered colours
- Allow multiple layers of colour to be added to a project without the need of firing between layers
- Mix with frit that dries rock hard to create designs with varying heights of texture that are then able to be decorated with liquid colours without the frit moving. Frit mixed with Layering Mix can be stored for later use as long as it is kept damp in an airtight container.

Start with a ratio of 1:1 and adjust the thickness by adding more powder until you have the desired consistency. For an opaque basecoat, apply with a soft brush and allow to dry 24 hours before adding wet colour on top. The colours may have small pinholes when applied but that fires out or gets covered by subsequent layers of colour. Mixed colours can be stored for later use in an airtight container.

Here is an example of what Layering Mix was actually designed to achieve, multiple layers of colour to create a "painterly look" to fired artwork.

The photo on the left shows six layers of colour on the pears, five layers on one of the leaves and three layers on the branches. Before firing the outline was done with NT 1967 Dark Brown and re-applied in some areas to create more definition.

This example is to show one way that you can create many, many layers and then have it completed in one firing.

