



Northstar Glassworks, Inc.

Boro News Newsletter

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The Opaque Family

Introduction

Welcome back to the Boro News Newsletter! In this edition we are exploring some of the most versatile colors in the palette, the opaque family. Northstar presents a wide variety of opaque colors that offer the artist varying shades, textures, and intensities. The group of opaque colors that we are exploring in this newsletter consists of NS-54 Star White, NS-55 Periwinkle, NS-57 Midnight, NS-58 Mint, and NS-62 Bubblegum. Because of this family's smooth working properties and stable coefficient, they play an integral role in many applications. They are well suited for inside-out work, thin blown vessels, and as background colors for sculptural work (marbles and beads). Here are a few specific tips for each color in this group. We hope this information aids in better working of these colors and inspires creative new applications!

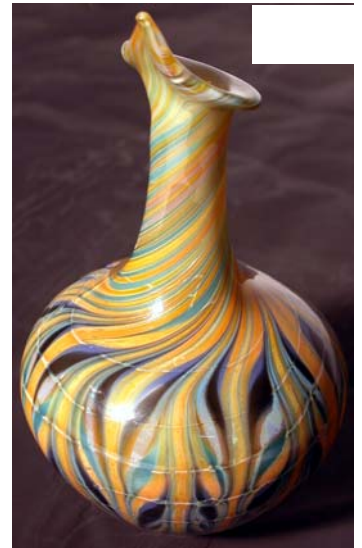
NS-54 Star White

This solid opaque white is atmospherically stable, unchanging in any flame setting. To achieve the smooth creamy texture this color can offer, start by heating the color up slowly. Any air trapped in the glass will gently rise to the surface and escape. If heated too quickly, the small quantity of air that is trapped in the rod will expand rapidly causing a pitted surface to form on the color. Once the color is heated and smoothed out it can withstand a large volume of heat. Use care when fire cutting or thinning the rod because it will absorb more heat and cause a rough spot. Another option to yield a super-smooth color is to re-mix the color rod just as Suellen Fowler does. By taking the rod and collapsing it into a solid marble of color, smoothing it out by drill mixing, and re-pulling the blob of color into a rod, the color is refined.

Applications for NS-54 Star White are too numerous to mention. It makes an excellent backing for any of the transparent colors and makes the

Amber/Purples shine. Because the white acts as a mirror, the light reflects and causes the outer surface of color to appear to have a neon-like glow. The reason it enhances the Amber/Purples so nicely is that it does not allow the light to pass through the bottle, thus preventing the transmission of the brown tint that the Amber/Purples yield in transmitted light. A wonderful color combination is a layer of NS-07 Ruby with a coating of NS-09 Yellow backed with NS-54 Star White. A pictorial example can be found in Newsletter Issue #8 titled, The Ruby Family. If you do not have a copy visit our website www.northstarglass.com, click on 'Product News', then 'Newsletters' and refer to the Ruby Family Newsletter Issue #8.

NS-54 Star White can also be used to enhance opaque striking colors as well. The reflective properties it offers benefit the Exotic color family and other opaque striking colors such as NS-44 Caramel and NS-45 Blue Moon. The combed vessel in **Fig. 1** is a good example of how a white backing intensifies the colors layered on the surface.



NS-55 Periwinkle

This opaque baby blue is another exciting versatile color. This is an atmospherically stable color, but in a heavily reducing flame, NS-55 Periwinkle will discolor slightly. As with the NS-54 Star White, NS-55 Periwinkle must be heated up slowly; the only difference is that once smoothed out it cannot take the large volume of heat that NS-54 Star White can.

Suellen's re-mixing technique works exceptionally well with this color. Another option is encasement.



NS-55 Periwinkle is a wonderful backing for transparent blue striking colors such as NS-14 Irrid, or NS-48 Light Blue Amber/Purple. **Fig. 2 (left)** shows how a nice cool blue can be achieved by sandwiching stripes of NS-69 Green Amber/Purple between a bottom layer of NS-55 Periwinkle and the exterior shell of NS-70 Ice Blue. NS-55 Periwinkle is also an ideal color for stringer application because it maintains intensity, brightness, and a smooth texture. Another way to utilize NS-55 Periwinkle is to mix other colors with it in order to yield new color shades. The disc pictured in **Fig. 3**

demonstrates how mixing NS-32 Violet and NS-55 Periwinkle together in a five

to one ratio creates a nice faux purple. If a more blue violet color is desired, decrease the

amount of NS-32 Violet to a three parts for every one part of NS-55 Periwinkle mixture (see **Fig. 4, left**).



Fig. 3

NS-57 Midnight

Midnight is a deep opaque blue that is ideal for stringer application and blowing thin. NS-57 Midnight is a very rich color and holds its intensity and vibrancy well! The working properties are similar to NS-55 Periwinkle, but NS-57 Midnight must be worked in a neutral to oxidizing flame to prevent reduction. To achieve a smooth surface, work this color in a similar manner as NS-55 Periwinkle, but do not overheat!

There are many neat possibilities to explore with this color. It is a great base color and can produce interesting effects when a transparent striking color is layered over it. NS-57 Midnight is also a good background to trap silver fume between it and a layer of clear.

NS-58 Mint

This is a nice atmospherically stable jadestone green without C.O.E. issues that is well suited for sculptural applications and background colors. NS-58 Mint is relatively easy to work but care must be taken to ensure that the surface of the color stays smooth and

bright. Work this color like NS-54 Star White but expose it to less heat. If it is overheated the color will bubble and develop gray streaks.

Pictured in **Fig. 5** is a vessel made by layering NS-03 Multi over NS-58 Mint. On the surface of the vessel NS-05 Orange was used for the hobnails and trailing. This unique celadon green is one of the many interesting colors that can be created by layering NS-03 Multi and NS-58 Mint together. Other pleasing greens can be created by layering NS-66 Sublime or NS-24 Transparent Green over NS-58 Mint.

NS-62 Bubblegum

This bright atmospherically stable opaque pink is excellent for sculpture and backgrounds. The working properties of NS-62 Bubblegum resemble that of NS-54 Star White and should be heated slowly to prevent forming a rough surface on the color. This color can lose intensity if thinned too much, so work a little thicker with this color or stick to sculptural applications.

NS-62 Bubblegum is useful in many applications. It is an excellent backing for gold fume. When heavily encased the color is magnified and can be used as a highlight color in sculptural work. It contrasts any blue well and produces a neat color when encased with NS-70 Ice Blue. Another excellent effect can be achieved by layering NS-13 Amber/Purple over NS-62 Bubblegum.

Closing

There are many possibilities to explore with colored borosilicate. We are always working on new and exciting products and colors to broaden the artist's palette. There are many surprises left undiscovered in the existing palette, so keep exploring and try new things! Remember, "A man's reach should exceed his grasp. Or what's a heaven for?"

Until next issue, go have fun exploring color!

Jesse



Fig. 5

NS-78 Mystery Aventurine

This is an especially unique color to work. The color you end up with depends entirely on what application you use. This single color comes with both opaque and translucent rods, allowing you to express yourself in a multitude of dazzling color effects.

Encased Opaque Rod Application

Although in rod form this NS-78 Mystery Aventurine looks like NS-73 Millennium Moss, this particular color acts like an amber purple striking to a beautiful purple/blue color when encased and worked inside. The opaque rods yield a richer color when struck and the added effect of the sparkle makes this a versatile color to use in any number of inside/ encased works.

Outside Opaque Rod Application

As with the translucent rods of NS-78 Mystery Aventurine, the opaque rods of NS-78 Mystery Aventurine used on the outside produces a hazy or frosty look to the piece. The opaque rod strikes to a yellow/green sparkly color with a slight blue tinge. The sparkle is not as deep as the translucent rods of NS-78 Mystery Aventurine, but it still catches the eye.



As with the opaque rods of NS-78 Mystery Aventurine applied on the inside (see top), the translucent rods of NS-78 Mystery Aventurine strikes when encased, but not to the same degree or intensity as the opaque rods. This application brings out hints of blues and purples, but overall, is more of a sparkly light amber.

Outside Translucent Rod Application

The translucent rods of NS-78 Mystery Aventurine become a gold/blue color when worked on the outside. Though the photograph may not fully demonstrate it, this is a sparkly color. While a bit more faded than in the opaque rods of NS-78 Mystery Aventurine, the sparkle is much more apparent and has more depth as you can see all the way through the glass and catch all the sparkle throughout the color application. On the surface, the color doesn't strike very much, with only a slight blue tinge produced.

Encased Translucent Rod Application



New Color Introduction

The Facts

Transparency: Transmitted light makes the color appear to be a translucent dark amber color. There is some transparency in the opaque rods as well as in the transparent ones.

Striking

Qualities: This color strikes, but application determines the final color. See descriptions on the other side of this sheet.

Viscosity: Similar to NS-74 Transparent Millennium Moss, this color condenses easily.

Boiling Issues: No boiling issues.

Recommended

Flame Use: Slow reducing introduction, then oxidize or reduce for varied effects.

Special Notes /

Qualities: This is a tricky color. No cracking issues, but as with any striking color, flame use, time worked, and basic technique will play a part in what you end up with. Experiment, test it out, and have fun!

Negative

Aspects: Remember, all of Northstar's colors are hand made by skilled artisans and therefore unique. This means there is always some degree of variation in any given color. For this color in particular there are a broad range of variations. This color will be separated into the correct qualities, but there will not be differentiation between opaque and translucent rods. Within a single pound of glass, you will receive opaque, translucent, and mixed rods. The only difference in working the color is how opaque/translucent the color will be. This is simply the nature of the color. It does share qualities with NS-73 Millennium Moss, so *don't overwork the color*, or it may crack.

