



GLASS CO.

GLASSTIPS: TRANSPARENTS**What to expect from selected Bullseye sheet glass.
revised November 5, 2007**

This handy reference guide explains what you can expect from your 2007 Bullseye sheet glass colors before and after heatwork in the kiln. Click on the small style swatches to the left to get info on individual colors. Check back to explore additional styles as they are added.

OPALESCENTS TRANSPARENTS

thin unfired cold glass color	3 mm unfired cold glass color
thin color after a full fuse firing	3 mm color after a full fuse firing

TRANSPARENT NOTES

For each style, the top row shows the double-rolled, unfired cold glass color. For stained glass, refer to the top row.

The same glass after firing to a full fuse is shown directly below the cold glass.

For kilnformed glass, refer to the bottom row.

Swatches shown are about two inches wide.

GlassTips describe ONLY the results of standard full fuse + slumping firings, i.e.: glass 6mm thick, 10" (25cm) square, fired to 1480°F (804°C), held for 10 minutes, then fired a second time to 1250°F (677°C) for 30 minutes.

To best ensure success, test glasses before use under your specific firing conditions. Use GlassTips information as a starting point only.

Glass reactivity: Not all reactions are visible. Some are too weak to be seen and others are masked by dark color.

"Striking glasses" change dramatically to reach target color during firing. Colors may vary, depending on firing schedule, rate, atmosphere, and heatwork. For color-sensitive projects, test before use.

Key to icons

Copper



Lead



Selenium



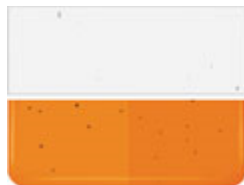
Silver



Sulfur



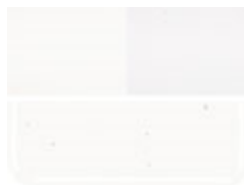
Striker

LIGHT ORANGE STRIKER 001025**Contains:****May react with:****Cold characteristics**

Striker. May vary from transparent clear to pale yellow.

Working notes

Fires to a stable, consistent color. With excessive heatwork, can opalize to a foggy orange.

CLEAR 001101**Cold characteristics**

Very faint green tint when viewed on edge.

Working notes

Stable. No color shift.

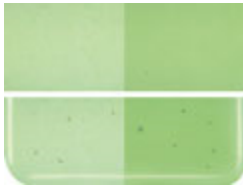
DEEP PLUM 001105

**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

LIGHT GREEN 001107**Cold characteristics**

Consistent color.

Working notes

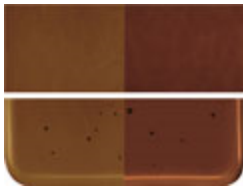
Stable. No color shift.

AQUAMARINE BLUE 001108**Cold characteristics**

Ranges from bluer-green to greener-blue.

Working notes

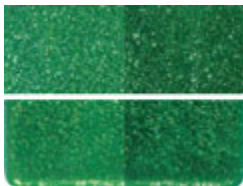
Stable. No color shift.

DARK ROSE BROWN 001109**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

AVENTURINE GREEN 001112**Cold characteristics**

A supersaturated chrome glass with metal flake glints in reflected light.

Working notes

Stable. No color shift.

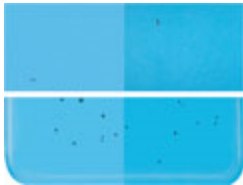
DEEP ROYAL BLUE 001114

**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

TURQUOISE BLUE 001116

Contains: **Cu**

May react with: **Se S**

Cold characteristics

Fairly consistent color from run to run in cold sheet.

Working notes

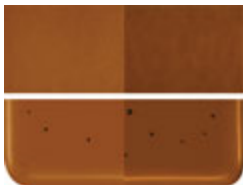
A copper glass. May have black interface reaction with certain cadmium and/or sulfur glasses ([001137](#), [001437](#), [000137](#), [000120](#), [000125](#), [001125](#), etc.).

MIDNIGHT BLUE 001118**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

SIENNA 001119

Contains: **Se S**

May react with: **Cu Pb Ag**

Cold characteristics

Consistent color.

Working notes

With excessive heatwork, can opalize to a dark green/brown.

YELLOW 001120

Contains: **S**

May react with: **Cu Ag**

Cold characteristics

Consistent color.

Working notes

A cadmium glass. May fire slightly deeper than the cold sheet. May react with copper glasses. See notes on [001116](#). See notes on multiple firings.

RED 001122



Contains: **Se S**

May react with: **Cu Pb Ag**

Cold characteristics

Variations from orange-red to dark red. "Catspaw" windows of lighter coloration typical of single-rolled sheets.

Working notes

A cadmium/selenium glass. Generally fires deeper (more red) than cold sheet. "Catspaw" effect disappears on firing. See general notes on striking glasses and multiple firings.

ORANGE 001125



Contains: **Se S**

May react with: **Cu Pb Ag**

Cold characteristics

Some variation from more yellow-orange to red-orange.

Working notes

A cadmium/selenium glass. Generally fires deeper (more red) than cold sheet. See general notes on striking glasses and multiple firings.

CHARTREUSE 001126



Contains: **S**

May react with: **Cu Pb Ag**

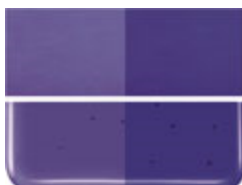
Cold characteristics

Color may appear varied in density.

Working notes

More consistent color density. No shift in hue. With excessive heatwork, color opalizes and turns a dense green/brown.

DEEP ROYAL PURPLE 001128



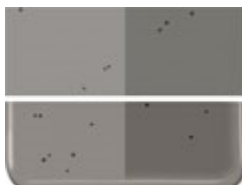
Cold characteristics

Very dark glass. Little light transmission in 3 mm thickness.

Working notes

Stable. No color shift.

CHARCOAL GRAY 001129



Cold characteristics

Very dark glass. May have very slight pink/purple coloration of gray.

Working notes

Stable. No color shift.

MEDIUM AMBER 001137



Contains: **S**

May react with: **Cu Pb Ag**

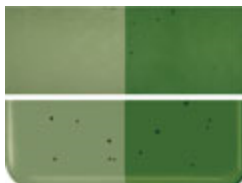
Cold characteristics

Varies slightly from lighter to darker shade.

Working notes

A sulfur glass. May have dark interface reaction with copper-bearing ([001116](#), [001408](#), [001417](#), [000116](#), [000144](#), [000145](#), [000147](#)) and lead-bearing ([001311](#), [001411](#), [000301](#), [000305](#)) glasses.

OLIVE GREEN 001141



Cold characteristics

Consistent color.

Working notes

No color shift. Slight opalizing with excessive heatwork.

KELLY GREEN 001145



Contains: **Cu**

May react with: **Se S**

Cold characteristics

Consistent color.

Working notes

Color may become cloudy with excessive heatwork.

LIGHT CORAL STRIKER 001205



Contains: **Pb**

May react with: **Se S**



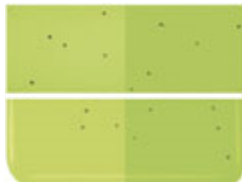
Cold characteristics

Striker. Transparent clear. On edge, resembles 001101.

Working notes

Fires to a stable, consistent color.

FERN GREEN 001207



Contains: **S**

May react with: **Cu Pb Ag**

Cold characteristics

Lighter than 001107.

Working notes

Consistent, solid color.

LIGHT PINK STRIKER 001215



Contains: **Pb**



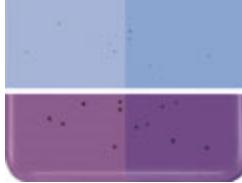
Cold characteristics

Varies from lighter to darker; sometimes with lighter dappling in single-rolled sheets. Generally lighter and slightly more blue/pink than 001311.

Working notes

Color usually deepens on firing. Possible dark interface reaction with selenium and/or sulfur glasses ([001122](#), [001125](#), [000124](#), [000125](#), [001137](#), [001437](#), [000137](#)). Less viscous (softer) than most other glasses.

VIOLET STRIKER 001234



Contains: **Pb**

May react with: **Se S**



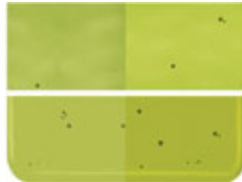
Cold characteristics

A deep royal blue color.

Working notes

Fires to a consistent, transparent violet. Becomes slightly cloudy with excessive heatwork.

PINE GREEN 001241



Contains: **S**

May react with: **Cu Pb Ag**

Cold characteristics

May include brown areas.

Working notes

At full-fuse temperatures, the brown areas appear as transparent wisps. Such wisping is more noticeable in a thin (-50) sheet and would be amplified by fusing an opalescent glass style under it. Unless a pure pine green is desired, these uniform wisps could be used as a design feature.

SUNSET CORAL 001305



Contains: **Pb**

May react with: **Se S**

Cold characteristics

Color is transparent and varies in density.

Working notes

Fires to a consistent, more highly saturated color. May turn lighter and more transparent with excessive heatwork.

CRANBERRY PINK 001311



Contains: **Pb**

May react with: **Se S**

Cold characteristics

Varies slightly from lighter to darker shade; sometimes with lighter dappling in single-rolled sheets.

Working notes

Color will almost always deepen on firing. Possible dark interface reaction with selenium and/or sulfur glasses ([001122](#), [001125](#), [000124](#), [000125](#), [001137](#), [001437](#), [000137](#)). Less viscous (softer) than most other glasses.

MARIGOLD YELLOW 001320



Contains: **Se S**

May react with: **Cu Pb Ag**

Cold characteristics

Consistent color.

Working notes

Heavy, consistent opalizing with excessive heatwork.

CARNELIAN 001321



Contains: **Se S**

May react with: **Cu Pb Ag**

Cold characteristics

Consistent color.

Working notes

Stable and consistent color. May Opalize to a heavy brown with excessive heatwork.

GARNET RED 001322



Contains: **Se S**

May react with: **Cu Pb Ag**

Cold characteristics

Appears light in color saturation with thin threads of color variation.

Working notes

Matures to a more consistent color with deeper saturation. May contain subtle threads of darker color. May opalize heavily with excessive heatwork.

FUCHSIA 001332



Contains: **Pb**

May react with: **Se S**

Cold characteristics

Consistent color.

Working notes

May become cloudy with excessive heatwork.

GOLD PURPLE 001334



Contains: **Pb**

May react with: **Se S**

Cold characteristics

Appears as a dark transparent. May appear to be blue in color.

Working notes

Fires to a consistent, transparent, deep purple.

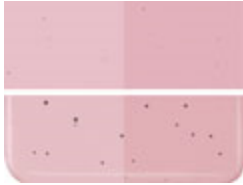
CRYSTAL CLEAR 001401

**Cold characteristics**

Brilliant colorless clear.

Working notes

When fired over colored glass, allows more pure, true hue of base color to show. Especially true in thicker sections.

LIGHT PLUM 001405**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

STEEL BLUE 001406**Cold characteristics**

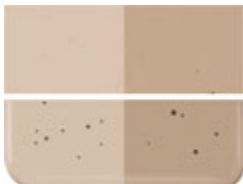
Consistent color.

Working notes

Stable. No color shift.

LIGHT AQUAMARINE 001408Contains: CuMay react with: Se S**Cold characteristics**

Consistent color.

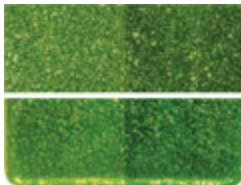
Working notesA copper glass. Possible dark interface reactions with sulfur ([000137](#), [001137](#), [001437](#)) glasses.**LIGHT BRONZE** 001409**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

LIGHT AVENTURINE GREEN 001412

**Cold characteristics**

Consistent color.

Working notes

Opalizes slightly upon firing.

LIGHT SKY BLUE 001414**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

LIGHT TURQUOISE BLUE 001416Contains: **Cu**May react with: **Se S****Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

EMERALD GREEN 001417Contains: **Cu**May react with: **Se S****Cold characteristics**

Slight variation within blue to yellow range.

Working notesA copper glass. Possible dark interface reactions with sulfur ([000137](#), [001137](#), [001437](#)) glasses.**TAN 001419****Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

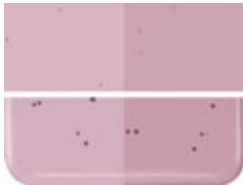
SPRING GREEN 001426

**Cold characteristics**

Slight variation within blue to yellow range.

Working notes

Stable. No color shift.

LIGHT VIOLET 001428**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

LIGHT SILVER GRAY 001429**Cold characteristics**

Slight variations from lighter to darker.

Working notes

Stable. No color shift.

LIGHT AMBER 001437

Contains: **S**

May react with: **Cu Pb Ag**

Cold characteristics

Varies slightly from lighter to darker shade.

Working notes

A sulfur glass. May have dark interface reaction with copper-bearing ([001116](#), [001408](#), [001417](#), [000116](#), [000144](#), [000145](#), [000147](#)) and lead-bearing ([001311](#), [001411](#), [001301](#), [000305](#)) glasses.

KHAKI 001439**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

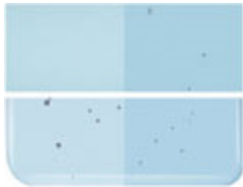
NEO-LAVENDER 001442

**Cold characteristics**

Color variations from pink to blue depending on light in which viewed: natural, incandescent, or fluorescent.

Working notes

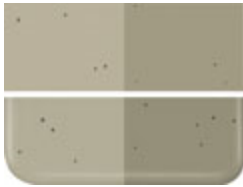
When fused over other colors, (e.g. red, orange), may tend to deepen or brighten them.

SEA BLUE 001444**Cold characteristics**

Consistent color.

Working notes

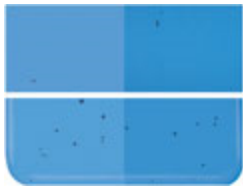
Stable, no color shift.

OREGON GRAY 001449**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

TRUE BLUE 001464

Contains: Cu

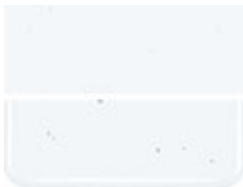
May react with: Se S

Cold characteristics

Consistent color.

Working notes

Stable, no color shift.

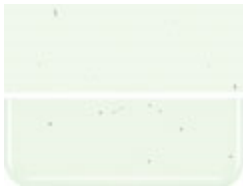
JUNIPER BLUE TINT 001806**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

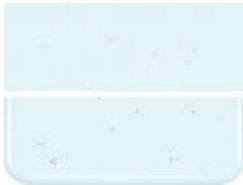
GRASS GREEN TINT 001807

**Cold characteristics**

Consistent color.

Working notes

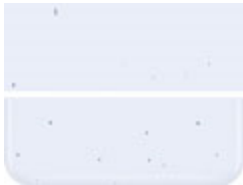
Stable. No color shift.

AQUA BLUE TINT 001808Contains: **Cu**May react with: **Se S****Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

INDIGO TINT 001818**Cold characteristics**

Consistent color.

Working notes

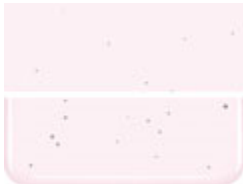
Stable. No color shift.

PALE YELLOW TINT 001820**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

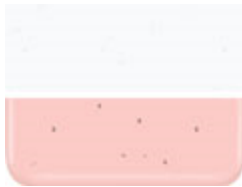
ERBIUM PINK TINT 001821**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

BURNT SCARLET TINT, STRIKER 001823



Contains: **Pb** **Ag**

May react with: **Se** **S**



Cold characteristics

Appears almost clear with blue/green tints.

Working notes

Matures to a consistent burnt-scarlet tint.

RUBY RED TINT, STRIKER 001824



Contains: **Pb** **Ag**

May react with: **Se** **S**



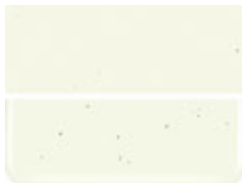
Cold characteristics

Appears close to clear with blue/green tints.

Working notes

Matures to a consistent ruby red tint.

GREEN TEA TINT 001826



Contains: **Se** **S**

May react with: **Cu** **Pb**

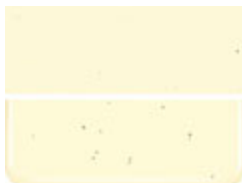
Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

LIGHT AMBER TINT 001827



Contains: **Se** **S**

May react with: **Cu** **Pb**

Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

GRAY TINT 001829



Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

RUBY PINK TINT, STRIKER 001831



Contains: **Pb**

May react with: **Se S**



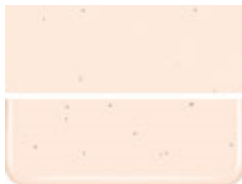
Cold characteristics

Appears almost clear with blue/purple tint.

Working notes

Matures to a consistent ruby pink tint. Becomes more pink with excessive heatwork.

CORAL ORANGE TINT 001834



Contains: **Se**

May react with: **Cu Pb Ag**

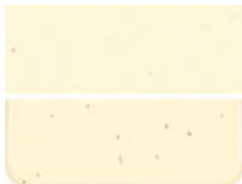
Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

MEDIUM AMBER TINT 001837



Contains: **S**

May react with: **Cu Pb Ag**

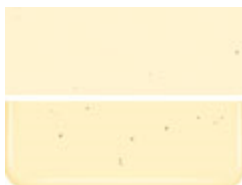
Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

DARK AMBER TINT 001838



Contains: **S**

May react with: **Cu Pb Ag**

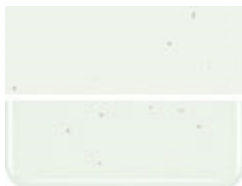
Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

SPRUCE GREEN TINT 001841



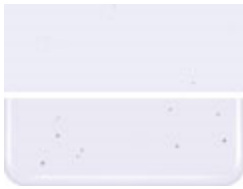
Cold characteristics

Consistent color.

Working notes

Stable. No color shift.

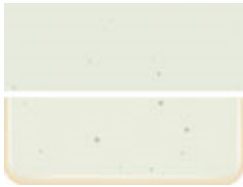
LT NEO-LAVENDER SHIFT TINT 001842

**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift. The hues of shift colors change depending on the thickness and/or lighting of the casting.

RHUBARB PINK/GREEN SHIFT TINT 001859

Contains: **Se**

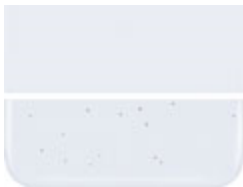
May react with: **Cu Pb Ag**

Cold characteristics

Consistent color.

Working notes

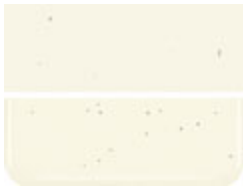
Stable. No color shift. The hues of shift colors change depending on the thickness and/or lighting of the casting.

GRAY BLUE TINT 001864**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.

OLIVE SMOKE TINT 001867**Cold characteristics**

Consistent color.

Working notes

Stable. No color shift.