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Preface

Welcome to the world of color according to Mayco. We have manufactured high quality ceramic products for over 50 years, starting in California and then relocating to Ohio in the early 1970's. Our products are now enjoyed by different ceramic enthusiasts all over the world: hobbyists, potters, educators, contemporary studios and finished ware producers.

We work very hard to provide you with consistent, top performing glazes and acrylic stains in a broad range of colors in both non-toxic and health caution formulas, depending on your needs. Our engineers have established very strict quality control procedures to insure that the product you receive performs to the very highest standards. All products are tested by an independent toxicologist and are properly labeled for conformance to ASTM and FDA guidelines.

This product guide is designed to provide you basic information and application instructions and is meant to be used as a desktop reference manual. Of course, our technical service and education departments are available to work with you to achieve better understanding, maximizing the performance of our products. For any questions, please contact us at 614-876-1171 or e-mail your questions to technical@maycocolors.com.

Mayco is committed, through our marketing and education programs, to promote ceramics. We are dedicated to manufacturing superior products at a reasonable cost for all to enjoy.

Health & Safety

Ceramics is one of the most rewarding and enjoyable of all hobbies, and one of the safest, if some simple common-sense precautions are taken. As with any activity, responsibility must be taken for safe practices.

General rules of good housekeeping and common sense should be applied when doing ceramics. Following simple rules will insure your safety and help you produce great results when creating a ceramic project.

Our “Health and Safety Bulletin” is available for that purpose. It is available on our web site at www.maycocolors.com. In addition to this bulletin, we urge you to read other health and safety information, and to talk to your dealer, distributor or certified ceramics teachers about the safe use of ceramic products. MSDS (Material Safety Data Sheets) are available on our website or can be obtained by contacting Mayco Customer Service Department.

All Mayco products are properly labeled for material safety. Read labels with care. In ceramics, as in all areas of human activity, proper usage of products insures safety. It is the responsibility of the user to read and understand the product label and to follow the guidelines for safety. Anyone not able to understand and follow the label instructions and safety guidelines should have an adult, competent of doing so, supervising the application and usage of all Mayco products. This includes the preparation, application and firing of these products. The person firing a kiln should have complete knowledge of and understand the specific instructions for operation of the kiln as provided by the manufacturer. The user should know any local ordinances applicable to the installation of the kiln.

To insure your health and safety, follow these simple basic rules:

- Keep work surfaces and shelves clean by wiping down with a wet sponge.
- Clean up spills when they occur. Do not allow to dry. **Keep dust under control at all times.**
- Work on a newspaper or paper towel for easy clean up and disposal.
- Do not smoke, eat or drink when working with hazardous ceramic materials. **Do not put your brush or brush handle in your mouth.**
- Wash your hands before you begin. The natural body oils and salts on your hands may affect the finished piece. Any open cuts should be properly covered.
- Wash your hands thoroughly when you are through working.
- Use a smock when working with ceramic materials. Wash often and separately from other garments.
- Keep children away from kilns and out of glaze dipping rooms. Only a qualified adult should operate a kiln.
- Children should not use lead-containing glazes or other hazardous ceramic materials.
- Do not intermix dinnerware safe glazes containing lead.
- If pregnant or contemplating pregnancy, tell your physician about your work with ceramics.
- When using solvent-containing ceramic materials, work out doors, in a locally exhausting hood or with an exhaust fan. Do not use or store near kilns, other heat sources or an open flame. Dispose of used rags in an airtight metal container.
- Do not spray apply any product.

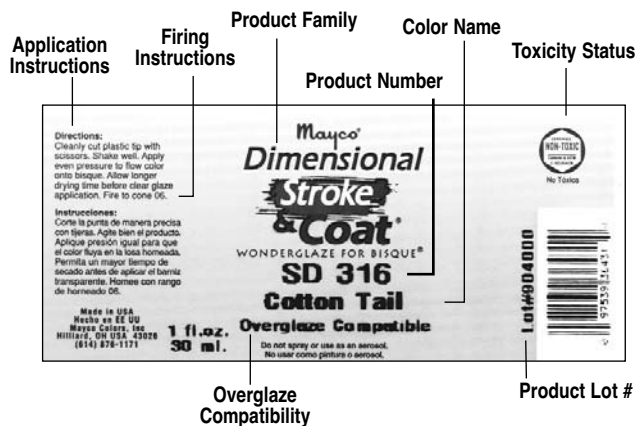
- Do not fire kilns in an enclosed area. Use a kiln ventilation system. Carbon monoxide fumes can build up and present a danger. Consult with your kiln supplier or manufacturer for more information.
- If you should ingest ceramic products, seek medical help immediately.

A neat work area should include the following:

- A table covered with several layers of newsprint and a comfortable chair.
- An old towel under the newsprint - this will cushion the ware.
- Only the products and pieces that you are working with at one time to avoid contaminating other pieces.
- Proper ventilation.

The labels on a product are very important and give you a wealth of information. Read the label for information on proper product use and hazards, if any.

Ceramic hobby glazes are manufactured using a variety of raw materials. Most of the ingredients are mined and extracted from the ground. Some of these materials can be classified as toxic and if misused can be harmful. The key to safe use of all art materials starts with professional education and training. Contact your Mayco distributor for information on seminars in your area.



Non-Toxic Glazes

Non-Toxic glazes are formulated without the addition of lead. They are tested for safety by an independent toxicologist. They meet FDA standards and those for the Arts and Craft Material Institute for which the non-toxic seal is assigned. You can use these glazes and products with confidence and ease. These products contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. This does not mean that any less care should be given while handling these products.

Dinnerware Safe (Food-Safe) Glazes

Many glazes are formulated to be safely used on surfaces that come into contact

with food or drink.

- If surfaces will come into contact with food or drink, use only glazes that are labeled food or dinnerware safe. Follow label instructions closely.
- Do not mix lead-containing dinnerware safe glazes, as the balance of ingredients in each glaze will be disrupted. Each mixture would have to be re-tested by an approved laboratory to determine if the mixture is also food safe.
- It is the responsibility of anyone making pieces for resale to have them tested by an approved laboratory for lead release.
- Proper firing of dinnerware safe glazes is critical. Use shelf cones on the kiln shelves to insure that the pieces are fired hot enough, even if the kiln is electronically controlled or has an automatic kiln sitter. Always fire in accordance with manufacturer's instructions. If crazed or under fired, these glazes may not be food safe. Too heavy an application of glaze, fast firing or not firing to the proper shelf cone listed on the label may result in a glaze that does not meet the FDA standards.

Lead and/or Cadmium Containing Glazes

Lead and cadmium are used in many ceramic glazes. Cadmium is used to produce brilliant reds and yellows. Lead gives a brilliance to the glaze and allows the glazes to mature well at lower firing temperatures (shelf cone 06).

Glazes containing lead and/or cadmium should be handled with respect. The dust from such glazes should not be inhaled. Anyone who is pregnant or contemplating pregnancy should only use these glazes with professional supervision. Use good personal hygiene when working with these types of glazes and keep them out of the reach of children.

Sprays, Solvents and Overglazes

These products are easy to use safely and will present no problems as long as these important rules are observed:

- Containers should be kept tightly closed when not in use.
- **Keep out of reach of children.**
- Aerosol sprays, solvents and solvent-based overglazes should be used outdoors, with a locally exhausting hood or spray booth or a window exhaust to assure adequate ventilation.
- Do not use near an open flame or heat source.
- Clean up after use and dispose of products properly in a metal container designed for disposal of flammable materials. Contaminated materials can be washed or placed under water until final disposal.

Slip

The mixture of any fine powder like slip requires the use of a safety mask approved by OSHA. The work area should be well ventilated with a system that draws all dust. This area should be away from other working areas so as not to spread the fine dust particles. Good housecleaning habits are necessary when mixing and pouring slip. Wipe up spills immediately. Do not sweep the area. Chronic lung damage may result from prolonged inhalation and exposure to the clay dust.

FIRED PRODUCTS & ACCESSORIES

Ware Preparation

Greenware is prepared using a cleaning tool, grit sanding pad, a duster brush and a slightly dampened sponge – preferably a sea wool or synthetic sponge. Use a clean-up tool in a diagonal motion to remove the seam line. A grit sanding pad is then used over the seam line to remove any marks or imperfections not removed with the clean-up tool. Use a circular motion to prevent misshapen ware. Re-carve any lost detail on the piece, making sure lids fit and holes are drilled for lamps.

A duster brush is used to clean away the dust particles from the ware. Remove any remaining dust by lightly cleaning with a slightly damp sponge. Do not saturate the piece with water or scrub the ware with the damp sponge. This could affect the final finish.

If the ware was cleaned previously but has been sitting around for a while, the piece should be given a light cleaning with a damp sponge before applying the finish to remove any dust that may have accumulated.

Your choice of finish should be made at this time. Some colors, such as translucent underglazes, opaque underglazes and some specialty glazes, are applied at the greenware stage. If glazes are to be applied, the piece will most likely need to be fired to bisque first. Check the jar label or consult a qualified ceramic instructor if you have questions.

Once the piece has been fired to bisque, the glaze can be applied. Glaze makes the ware vitreous, sealing it, so water does not migrate through the piece. A glaze can be transparent, semi-transparent, semi-opaque or opaque. Your choice of glaze will depend on the final look desired. Once the choice of glaze(s) has been made, the first step is to go over the bisque with a damp sponge to remove any lingering dust that may have been fired onto the ware.

Always apply glaze according to label directions. Use a brush or sponge, whichever is suitable for the particular glaze and technique. Shake or stir the color in the jar prior to application. Sometimes it may be necessary to thin the glaze due to the specific product or because of the method of application. Always check the label for specific instructions or method of application for a given color.

General Glaze Terms

Glazes are the protective coatings that make ceramics safe and useful. Without the fired surfaces, the ware would not be able to hold water or be safe for food. The many types and textures of glazes that Mayco offers are almost endless - from bright shiny reds to soft pastels, metallic gold to satiny rich black. Mayco is committed to bringing the latest technology and safest products to market for the discerning consumer. All of Mayco colors are tested independently by a toxicologist to insure that they meet or exceed the government's strictest standards.

There are some terms that the consumer needs to know when choosing a glaze for any finished piece. These terms let the user know the characteristics of the glaze – whether it is shiny or dull, transparent or opaque, safe to use on utility items or for decorative items only. Reading the label is the best way to insure that you have selected

the correct product for your technique and piece.

The jar label should be read each time that you use a product. At times raw materials may change or become obsolete. In order to continue producing a specific color, changes to the formula may be required. The label will have the most up to date information concerning your safety and that of the piece you produce. Mayco is committed to bringing you “America’s finest colors” and providing you with a fun and safe hobby.

Surface: The first category for glazes deals with the surface shine. The following terms will help you understand the labels more clearly and will allow you to make the best choice of products for great looking results. Some glazes fall in between all of these groups. Some glazes even have tiny specks or granules of a contrasting or complimenting color floating in them.

Gloss - Shiny and smooth, bright high gloss and a highly reflective surface.

Satin - Not real shiny, but not dull either. Think of an eggshell or a satiny sheen.

Matte - The opposite of gloss. This surface is duller than Satin reflecting little shine.

Dead Matte - Even duller than a Matte. This surface reflects no light.

Opacity - Refers to the transparency of the glaze. Some glazes are so transparent that it’s like placing a clear piece of glass on top of the ware. These clear glazes can act like a magnifying glass on top of the ceramic surface or on top of under-glazes. Some glaze colors are nearly opaque and others totally so.

The codes and definitions for the opacity of glazes are:

C: Clear - the glaze is completely clear adding only a shiny wet look and bringing out the true underlying colors on the piece.

T: Transparent - the color underneath is slightly tinted by the overlying glaze changing the appearance only a little.

ST: Semi-transparent - the underglazes beneath these are identifiable, but are changed by the tone of the glaze over them.

SO: Semi-opaque - light underglaze colors will not show through and dark colors will be muted.

O: Opaque - most colors will not show through.

Safety:

One of the most important considerations when choosing a glaze deals with their use of utilitarian or serving pieces. In our industry, several words are used to describe the level of potential hazard that a glaze poses to a customer. Some words are used to describe the product in the liquid state and others are used to describe the finished glaze surface after firing. To determine the toxicity of a glaze in its liquid state, formulas are submitted to an independently licensed toxicologist who examines each glaze formula and determines whether the product can be labeled as non-toxic or whether it requires a health caution label.

To determine dinnerware safe, a second set of tests are required. Samples of the

glaze in its fired form (we use coffee cups) are tested by an independent laboratory facility for leachability of lead and cadmium. If the surface passes the standards set by the Food and Drug Administration (FDA), then it may be used on food contact areas and can be labeled as dinnerware safe. Dinnerware safe only refers to the leachability of lead and cadmium; other surface characteristics are not considered. Please be aware that if a finished surface is bumpy, grooved, pitted, cracked or rough, there is potential for bacteria to hide out in the surface texture. So, even if a glaze is technically dinnerware safe, it may not be practical for use on food or beverage containers due to the difficulty of cleaning. A comparison would be a cutting board and the care required when preparing foods. Glazes fall into the following categories.

Non-Toxic: Refers to the product in the jar. Contains no harmful ingredients in sufficient quantities that could be harmful to humans (including children).

Health Caution: Refers to the product in the jar. There are some ingredients present in large enough quantities that the product may be harmful to humans. There will be detailed information on the product label as to the type of risk that is posed as well as proper handling instructions. Even more detailed information is available on the relevant Material Safety Data Sheet (MSDS).

Dinnerware Safe/ Food Safe: Refers to the finished, fired surface of the glaze. Once fired according to the instructions on the product label, the fired surface may be used in contact with food or beverage without leaching potentially harmful elements from the glaze into the food or beverage.

Not for Dinnerware Use/Not for Food Use: Refers to the finished, fired surface of the glaze. Even when the glaze is fired according to label directions, the fired glaze may potentially transfer harmful elements into food or beverage upon contact.

Here are some examples to illustrate the differences:

Stroke & Coat glazes are Non-Toxic and Dinnerware-safe. There are no toxic elements present in the liquid state, and therefore, no toxic elements to be leached into food or beverage.

Classics Crackles and **Crystalites** are Non-Toxic, just like the Stroke & Coats. And although they are also Dinnerware-safe, the surface should be examined to determine if it is easy cleanable after food contact.

C-109 Wonder Clear Dipping Glaze has a Health Caution and is Dinnerware-safe. There is lead present in the liquid glaze and care must be taken to avoid exposure through inhalation or ingestion. However, when fired according to label directions, the fired surface of C-109 conforms to the standards established by the FDA and is dinnerware safe.

Other products (like our Exotics glaze line) have a Health Caution and are Not for Dinnerware use. There are potentially harmful elements present in the liquid glazes and instructions must be followed for proper use to avoid exposure. Even when the glazes are fired according to label instructions, they should not be used on food or beverage contact areas, as enough of the harmful elements may be transferred to the food or beverage to be considered harmful to humans.

Application Methods

The following list gives an overview on the general application of glazes. There are times when only two coats may be required, some times four coats, applied to bisque or applied to greenware. Always read the jar label for the proper application instructions. There are times when a specific technique may require you to deviate from the instructions on the jar. At those times, follow the technique carefully and apply those instructions only at that specified time.

- Are generally applied to properly fired shelf cone 04 bisque. Always read the label for possible exceptions.
- Wipe the piece down with a damp sponge before glazing.
- Use either an Oval Mop or Flat Glaze brush to apply glazes and check individual glaze categories for any exceptions.
- Shake jar and/or stir well before using. The consistency should be like melted ice cream.
- Apply 3 flowing coats unless noted differently on the jar. Clear glazes require only 2 coats. Bright Reds usually require 4 coats. Check individual glaze categories for exceptions.
- Fire to shelf cone 06 unless noted differently on the jar label. Clean brushes with warm water and Brush Cleaner.

Brushing

Fired color is best applied with a natural hair brush. Use an Oval Mop, Flat Glaze or Pointed Round brush. There are synthetic hair brushes that can also be used to apply many of these same products. A wide selection of brushes is available and all have been designed for specific needs and products. Some brushes can be used in a variety of products. Always clean brushes well between uses.

For general application, we recommend that you use an Oval Mop to apply opaque underglazes and glazes. Oval Mops come in several sizes. A second choice would be a Flat Glaze brush. A Flat Glaze brush is helpful when brushing glaze out of the embossed areas on a piece. A Flat Glaze brush is preferred when applying non-toxic glazes to highly detailed or embossed pieces. The size of the brush should be as large as possible for the area being covered. For smaller areas, a Pointed Round brush can be used.

Color should not be used directly out of the jar to avoid possible contamination of the remaining color. Color should be placed onto a tile or in a shallow dish. Do not use wax-coated paper cups to hold color; the wax could prevent the color from adhering properly.

Moisten the brush with water and remove the excess. Dip the brush into the color up to the ferrule (metal part of the brush.) Tap the brush on the jar rim or tile to remove drips. The brush should not be dragged along the jar rim to remove color from the bristles. A full load of color should remain in the hairs of the brush.

Apply color in a flowing motion. Do not “scrub” color onto the ware. The brush should never drag because of a lack of color. Most likely a three-coat application will be needed. Not all coats are equal. If bisque is visible underneath the first dried coat of color, then apply an extra coat for proper coverage. The thickness of the three coats combined should be about the same as the thickness of a postcard. Some colors require

more or less than three coats of product. Always check the jar label for specific directions for the application of each color.

Apply each coat in a different direction. Crosshatch each successive coat applying at a 90° angle to the previous one. This will give more even coverage. Allow each coat to dry a few minutes until the shiny look is gone.

Rolling a Glaze

Pouring or rolling a glaze to the inside surface of a container that is difficult to reach is a simple solution to glazing with a brush. Care should be taken when using this method of glazing because some problems can occur. The inside of the piece must be free of any debris and clay dust. Any clay particles left inside the piece may cause crawling. Excessive glaze in or on the bottom of the piece may cause it to split, pit or crawl. These problems can be overcome by making sure the excess glaze is removed by inverting the piece as the glaze dries.

Choose a gloss glaze if possible; application is easier and it will be easier to clean the fired surface. If not using Roll-A-Coat you must thin the rolling glaze with Media or water to the consistency of coffee cream. (Roll-A-Coat, a specialty glaze designed for this purpose is already thinned to the proper consistency.)

Pour the Roll-A-Coat or thinned glaze into the piece and quickly rotate the piece covering the entire inside surface. Drain out the excess glaze and continue to rotate the piece momentarily to avoid glaze build up in any one area. Invert the piece to dry to avoid buildups and runs. This will keep the piece from splitting during the firing and avoid pitting of the glaze.

When the glaze is firm, turn the piece upright and check for any missed spots. Glaze these areas with a brush. Remove any glaze that has spilled on the outside surface with a damp sponge. Allow the piece to dry before glazing the outside.

Glaze Butting

Butting of glazes is the term used to describe a method of applying glazes side by side so that the colors meet but do not blend. To butt glazes, avoid overlapping the two glazes. Use a pencil to draw a line on the bisque to determine the precise placement of the glazes. The mark will burn away in firing. When butting glazes, the brush is used like a push broom at a 45° angle to shove a small ridge of glaze up to, but not over, the pencil line as the first coat is applied. This small ridge of glaze should give sufficient coverage to the perimeter of the area so that special care with successive coats is not necessary; they can be applied in the usual manner.

Butting should be all that is needed to control the flow of the glazes unless the glaze application is unusually heavy. On a vertical piece you can cut through the glaze while it is still wet and use a grease pencil (red marking pencil) to follow the original pencil mark. The grease in the pencil will provide enough of a barrier to keep the glazes in place.

Be aware that some colors are sensitive to other colors. Some white or clear glazes placed next to glazes high in copper compounds may discolor. Metallic blacks and greens may cause a fuming, shadowing or flashing onto the lighter color. This is caused by a chemical reaction between the two glazes during firing.

Glaze Combinations

Glaze combinations or the use of one glaze over another offer the hobbyist an expanded dimension to their decorating possibilities. There are “soft” glazes that move more during the firing process and these glazes have more tolerance against pitting, cracking or blistering. Using combinations of two types of glaze that react chemically to each other can give many exciting and unexpected results.

When two or more glazes that move or “boil” in the firing are used, one over another, a blending of the two colors results. The glaze next to the bisque will always dominate the piece because it has a stronger footing or hold on the bisque. Except for the Series 2000 or other non-toxic glazes, the glossier the glaze is, the more it moves in the firing. Heavier applications of these glossier glazes will produce more dramatic intermingling of the colors.

Not all glazes used in combination need to be so free moving. Variations to the mix, for example, using a Series 2000 Matte glaze with a moving glaze, can give fascinating results. A non-moving glaze will retard the movement of a more active glaze. An application of three coats of a moving glaze applied first on the bisque, then two coats of a non-moving glaze on top of that will result in the breakup of the top glaze into little islands of the matte color. The use of a Tuffy™ or Chore Boy™ sponge to apply leftover amounts of glaze creates interesting effects. Apply a moving glaze and then apply another glaze on top of that, then Tuffy™ sponge the third glaze on top of the previous two for a unique finish.

Sponging

Different types of sponges can be used in decorating a piece. Each offers a distinct look. More than likely, a silk decorating sponge will be used for sponging most colors. It gives the best application for most glazes when an even coverage is needed. A Sea Wool type sponge produces a bumpy, mottled look or may be used to veil the color onto the ware. Once the type of sponge is selected and the color has been chosen, follow these application instructions:

- Dampen the sponge and remove excess water onto a paper towel.
- Pour some of the color onto a tile.
- To load color, pounce the sponge into the color. Apply to the piece using the same pouncing (up and down) motion. Do not apply so much pressure to the sponge that the color runs out of the sponge and down the piece.
- Allow the wet look to disappear before adding additional coats.
- For solid coverage, more than three coats may be needed when using a sponge. As a general rule, four to five coats is required to achieve the same coverage as when you apply color using a brush.

Splattering

When splattering, a stiff bristled brush is loaded with color and then the handle of another brush is dragged over the bristles of the brush (toward the user), causing the color to splatter onto the ware in a speckled effect. Most any product can be applied this way. The specks of color can travel long distances, so cover or remove any other pieces from the decorating area.

Banding

Colored bands are created on round objects using a decorator's wheel. A decorator's wheel is a type of turntable that allows the ware to rotate evenly and freely while decorating. Most types of products can be used for this application. Some colors may require thinning to achieve proper color distribution or to create a specific effect. This method of applying color usually requires a round piece.

- Center the piece on the wheel.
- If possible, place something heavy inside the ware to weight the piece on the wheel, like a bag of beans or rice.
- Load the brush with color.
- While the wheel is spinning, the brush is brought to the surface of the ware. The piece continues to rotate while the brush is on the ware.
- Once color has been applied, the brush is lifted off the ware while the piece continues to rotate.
- Many bands of color can be applied and blended back onto one another for a variety of effects.

Antiquing

Antiquing with glazes can be a lot of fun as well. Glazes hide flaws in the bisque rather than accentuating them as One Stroke™ Translucent Underglazes do. The transparency of the glaze adds dimension to the piece. Great effects can be achieved by antiquing with a matte glaze under a gloss glaze, as well as the reverse - antiquing with a gloss under a matte glaze. Both glazes should be non-moving when used in this method. Generally a highly embossed piece is used to allow the glaze to fill in crevices.

To antique a piece with glazes:

- Apply one flowing coat to the entire surface and let it dry. More than one coat may be needed, but generally only one is required for proper color application.
- Using a damp sponge, wipe off the highlights on the piece.
- Apply two coats of the top glaze over the entire piece while concentrating the top glaze to the higher points of the embellishments.

Majolica

Majolica is a technique where a non-moving glaze is applied to the entire surface, and then design work is done on top of the unfired glaze using other glazes. This technique makes the design look less rigid and the colors are usually lighter in nature on the finished piece. There are a number of points to remember when choosing colors for a majolica technique. Lighter colors over darker colors lose their distinctness. The intensity of the colors being applied either over or under one another should be taken into consideration. The thickness of the combined colors on the surface should be a factor in the decision. The movement of the glazes in the firing should be noted as well. The shape of the piece can also influence the final outcome; a flat piece versus a vertical one could dramatically affect the outcome.

Airbrushing

Mayco does not recommend spraying or airbrushing ceramic glazes. Specific safety procedures must be followed along with the use of proper safety equipment designed specifically for the spraying of color. Do not spray apply ceramic products without proper OSHA approved respiration equipment.

NON-TOXIC GLAZES FOR BISQUE

Stroke and Coat® Wonderglaze® Glaze for Bisque

Stroke & Coat is the premier product to use in the “One Fire” or “1-2-3 Step” method of decorating on bisque. Apply to bisque, let dry, clear glaze and fire, producing a finish that is almost fool proof for everyone from the amateur to the master ceramist.

If one coat is applied, you get transparent coverage, two coats give a semi-opaque coverage, and three coats give a solid coverage. The variety of colors is not limited to the palette given, as all are intermixable to obtain intermediate shades. When applied heavily the color will retain some dimensional qualities that give the decorator a useful tool in a variety of techniques. They can also be applied over any non-moving glaze, underglaze, or Astro Gem™ surface. When thinned Stroke and Coat® is applied on top of a Series 2000 Matte surface in a brushstroke design or watercolor technique, Stroke & Coat takes on the underlying matte characteristic of the glaze. Two to three coats on top of a Series 2000 Matte glaze will give a shinier surface.

Application:

- Non-toxic.
- Apply to properly fired shelf cone 04 bisque.
- Apply one coat for a translucent look.
- Apply three coats for solid opaque coverage.
- All are intermixable to create a wider color palette.
- True color out of the jar makes design work easier.
- Use a soft glaze brush for ease of application.
- Apply smooth even coats for solid coverage. Dimensional or embossed effects can be achieved when applied heavily.
- Glaze with any clear glaze, dipping or brush-on type.
- Fire to shelf cone 06.
- Dinnerware safe when used with a dinnerware approved clear glaze.
- All luster compatible.
- Can be fired up to shelf cone 6. Check High Fire Guide.
- SC-69 Princess Pink and SC-70 Pink-a-Dot are more translucent than the rest of the Stroke & Coat. These colors may take 4 coats to achieve opaque coverage.
- Speckled Stroke & Coat performs in the same manner and has the same characteristics as the opaque Stroke & Coat line.

Stroke & Coat colors range from vibrant brights to pastel shades, and Speckled Stroke & Coats® provide a variety of speckled colors for today’s decorating needs. They can be used in a variety of decorating techniques like antiquing, banding, brushstroke work, dimensional accents, glaze butting, Majolica, marbleizing, spattering, sponging, stenciling and watercolor applications. A top coat of a clear glaze or a S-2000 transparent glaze should be applied to the dried color when not applied over an unfired glaze, as in a Majolica technique. This topcoat of glaze can be a clear dipping or a brush on type of clear glaze. Stroke and Coats, are resistant

to streaking or bleeding of the colors when the top coat of glaze is applied to the dry color, whether it is dipped, sponged or brushed onto the surface. There is no bleeding or running of the colors in the firing process.

Important: SC-13 Grapel and SC-33 Fruit of the Vine should have either C-101 Blu White Clear, C-105 Crystal Clear, C-109 Wonder Clear Dipping or SC-209 Clearly-the-Best Clear glaze applied over them to produce the brightest and clearest color. Some non-toxic clear glazes can turn the color milky.

Dimensional Stroke and Coat® Wonderglaze® for Bisque

Dimensional Stroke and Coat is a raised type of glaze that can be used with regular Stroke and Coat. These glazes are color-coordinated to the Stroke and Coats to give the artist a wider range of decorating possibilities. While regular Stroke and Coats can give some dimension or embossing, they do not compare to Dimensional Stroke and Coat. Dimensionals are formulated to stay raised when used on top of the glaze and resist the crawling that may occur when the regular Stroke and Coat is used in the same manner. These colors allow outlining in an embossed effect. The colors can be used to give contrast to a pattern not only by the use of color but by the added dimension of this glaze.

When applying the topcoat of glaze use a moistened sponge on the first coat and brush the second coat. The product may bleed if sponged too hard or while the color is even the least bit damp. There is no problem when the top glaze is dipped.

Classic Crackles™ Non Toxic Glazes

Characteristics:

Classic Crackles is a series of non-toxic crackle glazes in a subtle color palette appropriate for today's home décor. Stylish and sophisticated, Classic Crackles are ideal on items such as vases, candleholders and more.

Application:

- Apply three even solid coats to properly fired shelf cone 04 bisque using any soft fan or oval mop glaze brush. Fire to shelf cone 06. To accentuate the crackle pattern, antique the fired piece with a non-fired acrylic stain or mineral spirit stain.
- Simply apply a coat of the desired color to the fired piece and wipe off with a soft cloth. The color will fill in the cracks and make the crackle pattern stand out.

Firing:

Fire Classic Crackles to shelf cone 06. Allow the pieces ample room in the kiln for air circulation during firing. These glazes can also be high fired up to shelf cone 6 with various color shifts; refer to the High Fire Guide.

Notes:

- Sometimes the crackle pattern will be developed when the kiln is cool enough to open. Other pieces may need to sit out of the kiln for a period of time before the crackle pattern develops.
- Remove pieces from the kiln with a coffee filter or clean rag placed over your

hand. The oils in your hand can fill the cracks and prevent the antiquing colors from filling in the cracks.

- Pieces don't always need to be antiqued with black. You have an endless selection of colors that can be used to antique. If you prefer to use a fired product, use One Strokes on the fired crackled piece and then refire to shelf cone 06.
- If you prefer non-fired products, you can use an acrylic, mineral spirit stain or even shoe polish or India ink to stain the cracks.
- Classic Crackles are non-toxic but are not recommended for food surfaces. Bacteria could possibly become trapped in the exposed bisque between the cracks, making it inappropriate for surfaces that hold food.
- Crackle glazes place stress on the ware during firing. To prevent containers such as vases from splitting or cracking apart, make sure to use a non-toxic glaze to coat the remainder of the inside of the vase (such as Series 2000) to further reduce stress on the piece.
- You can use Stroke & Coat or One Strokes to create beautiful designs under Classic Crackles. Create the design with Stroke & Coat on properly fired shelf cone 04 bisque. Use only 1-2 coats of Stroke & Coat or the crackle will not develop properly. Allow to dry and then apply three solid even coats of Classic Crackle. Allow to dry and fire to shelf cone 06.
- When using One Strokes, apply your design on greenware and fire to shelf cone 04. Then apply three solid even coats of Classic Crackle. Allow to dry and fire to shelf cone 06.
- Gold and Mother of Pearl can be used as a finishing touch on your Classic Crackle piece. Decals also work well over Classic Crackle glazes.

Crystalite™ Non-Toxic Crystal Glazes

Crystalites™ are a group of crystal glazes that are a new generation in the formulation of non-toxic glazes. Crystalites are a non-toxic glaze combination in a jar. These unique magical potions of colors and rock-like crystals produce dramatic effects that flow and melt during the firing process. Their usage is almost endless in decorating possibilities and is limited only with your imagination.

Mayco's original crystal glazes are a standard in the ceramic hobby market. The introduction of the new Crystalites will set the new standard even higher for the industry. Truly, you will not believe that these are a non-toxic, non-moving glaze like those of the past.

Previous lead bearing crystal glazes flowed, allowing the crystals in the glaze to pattern or bloom, producing multi-colored beauty from one jar. Typically, a non-toxic formula creates a stiff glaze that does not allow the crystals to blossom or develop into colorful flowing arrays during the firing. This inhibits the vary nature of what you want to achieve in this type of glaze. Mayco's lab has formulated this new line of glazes to react like the old lead bearing glazes, but without all of the lead or safety concerns. This new formulation is unlike any other non-toxic crystals on the market today.

Mayco's new line of Crystalite crystal glazes are non-toxic and certified by ASTM. This means that there is no lead added in their formulation. Crystalites can be used safely by children in schools, institutions or anyone with health concerns.

Crystalites are applied using an Oval Glaze or Soft Fan Brush to shelf cone 04 bisque. The fan brush may help more in the even disbursement of the crystals, thus

creating a more pleasing pattern to the glaze. Generally two coats of the glaze are applied from the jar after being shaken thoroughly; shake the jar before applying each coat. With the application of the third coat of glaze, the crystals are stirred and shaken to suspend them into the glaze. Due to the nature of the non-toxic formula of the glaze, these crystals settle quicker and may need to be stirred more often while glazing. The brush should be swished down to the bottom of the jar to gather the crystals during the application of the third coat of glaze to insure a good coat of crystals are applied. Remember, that the beauty of these glazes are the disbursement of the crystals to produce an even pattern to the finished piece. Large clusters of crystals can be dispersed or manipulated more easily with a soft fan brush during the third coat. A little attention during the application of the third coat of glaze will produce stunning effects. The flow of the glaze can be great even with these non-toxic glazes. For this reason, the glaze crystals should be tapered off towards the bottom of the piece. The excess of glaze crystals on the bottom of the piece can run, creating unsightly feet or lumps.

Interesting patterns may be obtained by placing several rings of crystals in a necklace-like placement around the piece. The glaze may need to be strained in order to separate the crystals for this procedure. The crystals are then applied using a brush or small spoon in a linear necklace-like ring around the piece. This can be several rings in sequential order or in a zigzag pattern to produce the most pleasing effect.

The firing temperature of the Crystalites is shelf cone 06, but can be fired up to shelf cone 6. There is no need to fire the glazes any hotter to make the crystals flow, bloom more or to pattern better.

- Apply to shelf cone 04 bisque using an Oval Mop or Soft Fan Brush.
- Apply two coats, shaking the jar before applying each coat. On the third coat, stir and shake the crystals into the glaze. Stir the crystals often during application. Dip the brush down to the bottom of the jar while glazing to pick up the crystals. Apply the third coat while evenly dispersing the crystals over the surface of the ware.
- Avoid placing heavy amounts of large crystals near the bottom of the piece, as some crystals tend to flow more than others.
- Fired to shelf cone 06.
- All are non-toxic.
- Can be used in glaze combinations amongst other non-toxic glazes or Crystalites.

Elements™ Non-Toxic Glazes

Characteristics:

Elements™ are non-toxic glazes in natural earth tones. Surfaces vary from gloss to matte, with subtle variations in each color for a truly unique look. No two pieces will ever be alike. Elements are great for achieving a natural organic look or a sophisticated elegant look.

Application:

- Apply to properly fired shelf cone 04 bisque. Use a soft fan or glaze brush, depending on the area and surface to be covered.
- Generally three coats of glaze is recommended, however, applying four coats will produce a totally different look. For a different effect, brush on three coats and apply a final fourth coat using a silk or sea wool sponge.

- An uneven glaze application and the piece's shape and surface (plain or embossed) will also affect the look of the glaze.
- Elements Chunkies (EL-201 through EL-206) are a Elements base with the addition of crystals. Apply Element Chunkies in the same manner as Element glazes.

Firing:

Fire to shelf cone 06. Allow the pieces ample room in the kiln for air circulation during firing. A heavily loaded kiln will affect the color and the float within the colors. Elements may also be fired at higher temperatures, up to a shelf cone 6. These glazes develop their own personalities when high fired.

Notes:

- Color application, firing time and temperature, shape of the piece and placement of pieces in the kiln can all affect the final results. This is part of the beauty and versatility of Elements. Each piece will be uniquely different.
- Intermixing Elements with other glazes is unpredictable; make test samples first to see if the fired result is the desired effect. Combining them with other products may alter the chemical composition and change their non-toxic status.
- Elements and Element Chunkies are not overglaze compatible. When Elements are fired to lower overglaze firing temperatures (shelf cone 018-020), the original glaze color changes. However some of the matte finish Elements have interesting finishes after an overglaze firing. Experiment and make test samples before using overglazes with Elements.

Pottery Coat

Characteristics:

Pottery Coat creates the look of stoneware or colored clay bodies on bisque to simulate the look of high fire pottery/stoneware. Although Pottery Coats can be used alone, the best looks are achieved when used as a base coat in combination with Pottery Cascades and a flowing non-toxic glaze, such as Elements.

Application:

- Non-Toxic
- Apply to properly fired shelf cone 04 bisque.
- Lightly dampen the bisque with a moistened sponge before painting allows better adhesion to the bisque.
- Shake jar well before application. Product should be the consistency of melted ice cream.
- Apply with a soft glaze brush, using the largest brush to cover the area.
- Apply 3 even coats. Apply the coats at right angles to each other to minimize brush marks. Apply Pottery Cascades and Elements on top of the Pottery Coat, following instructions above.
- To use Pottery Coats on a functional item such as dinnerware, you must apply clear glaze to seal the surface. This will darken the color and will show uneven application and brush strokes. When used alone, Pottery Coats are porous and therefore, not recommended for use with dinnerware or other functional items.
- Fire to shelf cone 06.

- Clean brushes with Brush Cleaner and warm water.
- Pottery Coats are not overglaze compatible.

Pottery Cascades

Characteristics:

Pottery Cascades are non-toxic, free flowing glazes used to produce special effects or flow patterns when used in combinations with other non-toxic glazes. Pottery Cascades are not intended to be used alone. PC-602 White Cascade intermingles with the other glazes being used, introducing pure white to the colors you are using, blending with the color. White Cascade has a minimum movement and will stay in the pattern that you apply it in. Clear Cascade (PC-601) produces a flowing effect, and allows the color of the base glaze to show through. It can also alter your original color, creating a new color. It will form runs or you can direct the runs when you apply the product. Cascades should be used in combination with other non-toxic glazes; using a leaded product with Cascades will create stress on the piece during firing and crack the piece. For best results, use with Elements, Classic Crackles, Crystalite Non-Toxic Glazes, Stroke & Coat and Pottery Coat bases.

Application:

- Apply White Cascade with a brush in 1-3 coats. Can be dabbed on at random, evenly or unevenly to create different flow patterns using a sea wool sponge, Chore Boy™ or Tuffy™ sponge.
- Clear Cascade should be brushed on as you would apply a glaze. Apply 1-2 brushed coats over or under a non-toxic glaze. Do not go below the halfway point of the piece.
- Fire to shelf cone 06.

Notes:

- Can be applied between color, underneath and over colors for different effects.
- Shape of the piece affects the performance of the glaze
- Firing temperature, ramp rate and a soaking period may enhance the flow patterns.
- Avoid excess color toward the bottom of the piece to prevent drips from forming on the bottom of pieces.
- Pottery Cascades are overglaze compatible.
- Clean brushes with Brush Cleaner and warm water.

Series 2000™ Non-Toxic Glazes and Stoneware-Like Glazes:

Gloss, Matte and Specstone

Characteristics:

The development of Series 2000 Glazes introduced a new era in glaze formulation and technology while addressing the consumer's safety needs for non-toxic glazes.

While leaded glazes have a wide firing temperature range, non-toxic glazes have a narrower window in which the glaze will perform to its optimum potential. Series 2000 glazes mature at shelf cone 06 and for best results should be applied to bisque fired two cones hotter (shelf cone 04). Series 2000 are ideal for schools, nursing homes and institutional use, meeting the F.D.A. standard for lead and cadmium release. Their non-flowing characteristics can be used to advantage by the decorator.

Series 2000 glazes have a wide color palette and a range of finishes – from transparent to opaque, and from speckled to matte.

Application:

For solid even coverage, time and care should be given to their application. The first coat is the most important. Use an Oval Mop to apply the Series 2000 to a large plain area. This allows a full brush load of color to be delivered to the surface.

A Flat Glaze brush is suited for applying color to pieces with lots of detail. Using this brush on highly detailed pieces will help avoid any build up of color in the crevices. For the best coverage, apply each successive coat in an alternate direction. Always read the label instructions, as all glazes are not applied in the same way.

Notes:

- These glazes offer the artist the opportunity to do Majolica techniques (using a glaze on top of another unfired glaze). If doing a majolica technique it is best to add an additional coat of color. Handling the piece when designing can cause color to be removed.
- The Specialty Glazes (UR-90 or 151) can be used over the Series 2000 and retain their individuality, opening endless decorating options to the artist.
- New shades can be created within certain parameters. A lighter, more transparent color is created when mixed with S-2101 Natural Clear. This glaze mix remains safe and non-toxic.
- When mixing the Series 2000 Gloss Glazes, try a small test first. Some pigments are not stable when mixed together and may give unsatisfactory results. All matte glazes are intermixable.
- Do not mix Series 2000 glazes with glazes outside of this family. Doing so may alter the chemical composition and cause them to no longer be non-toxic or dinnerware safe.
- Do not apply Series 2000 to greenware as this will give very poor results.

Firing:

It is very important that bisque be fired two cones hotter than the glaze firing. A shelf cone should always be used to verify that the desired cone was reached through each firing.

Fast firing during the bisque and glaze firing does not allow the glaze to properly develop. This will produce trapped gases and carbons in the glaze. The preferred rate of increase during the bisque firing is 250° per hour and 375° per hour during the glaze firing.

Make sure the glaze has dried thoroughly prior to firing. Always give the pieces the proper space in the kiln chamber and provide proper ventilation during the firing cycle.

Roll-a-Coat™ Tintable Glaze

Characteristics:

Roll-a-Coat is a tintable rolling glaze used to coat the inside of bisque pieces. It is pre-mixed to the correct consistency for rolling. Roll-a-Coat can be tinted using Stroke & Coat to complement any decoration. It is available in a food-safe leaded formula and a non-toxic formula and is perfect for the inside of functional pieces such as pitchers, vases and teapots.

Roll-a-Coat Compatibility Chart	
When using Roll-a-Coat, it is very important to use compatible glazes on the inside and outside of the piece.	
If on the outside you use:	You should use on the inside:
Crystalites Non-Toxic Glazes	SC-210 Roll-a-Coat
C-109 Dipping Glaze	C-110 Roll-a-Coat
SC-209 Dipping Glaze	SC-210 Roll-a-Coat
AG, BG, CA, CG, or Exotic Series	C-110 Roll-a-Coat
Series 2000 glazes	SC-210 Roll-a-Coat
Stroke and Coat (without clear glaze)	SC-210 Roll-a-Coat
Pottery Coats (Bases & Cascades)	SC-210 Roll-a-Coat

Tinting Instructions:

1. Using the chart above, determine which Roll-a-Coat version you need to finish your ware.
2. Select a Stroke & Coat color to match or compliment the outside color of your piece.
3. The amount of Stroke & Coat added as well as the color value of the Stroke & Coat will determine the final tint of the glaze. Darker Stroke & Coat colors will require less color to tint the rolling glaze.
4. The color mixture should be prepared just prior to rolling the interior of the piece. A natural thickening may occur if the colored glaze is allowed to sit for extended periods of time.
5. Generally, 1 tablespoon of Stroke & Coat added to 2 oz. of Roll-a-Coat will produce a light to medium tint. Adding 2 tablespoons of Stroke & Coat to 2 oz. of glaze will produce a medium to dark or more opaque colored tint.
6. Shake and stir Roll-a-Coat until the Stroke & Coat color is completely mixed into the glaze.
7. If you desire a clear glaze finish on the inside of your piece, you may choose to use Roll-a-Coat alone with no tinting color.

Rolling Instructions:

1. Start with clean properly fired shelf cone 04 bisque.
2. Make sure any dust is removed prior to rolling. Anything left in the interior of

- the piece may affect the final surface of the Roll-a-Coat and cause crawling or pulling of the glaze.
3. Wipe the inside of the piece with a slightly damp sponge to make sure all dust and debris is removed.
 4. Working quickly, pour the freshly prepared Roll-a-Coat into the piece. Using a continuous rolling motion, coat the entire interior. Roll right up to the inside rim or top edge of the piece. Try to avoid drips over the top edge.
 5. Carefully pour out excess glaze and place the piece upside down to dry, preferably on a drying rack or other open device to allow air to circulate.
 6. After all the glaze has dripped out of the piece and some of the glossy sheen has faded, use a clean damp sponge to clean away unwanted drips or excess Roll-a-Coat. (Hint: If glaze dries on the piece, you can use a soft clean eraser to remove unwanted glaze.)
 7. Check rolled area for missed spots. Use a soft fan brush to add Roll-a-Coat to any missed areas by tapping once with color. Decorate the outside of the piece as desired. If the piece will not be dipped, be sure to cover all open bisque areas to seal the piece.
 8. If you use Stroke & Coat or a color designed to be dip glazed, dip the rolled piece only to the lip or rim. If the piece is dipped entirely into the clear glaze with a heavy application, crazing may occur.
 9. Allow entire piece to dry thoroughly.
 10. Fire to shelf cone 06.

Notes:

- Why can't you just thin your dipping or brushing glaze to achieve the same effect? Brushing, dipping and rolling glazes are each designed for specific purposes. Brushing glazes have leveling agents to minimize the appearance of brush strokes. Dipping glazes are designed for good sheeting action to minimize drips and runs. Roll-a-Coat is designed to produce a nice smooth coat without depositing excessive solids in the rolling process.
- We do not recommend reusing the left-over glaze. The remaining glaze can become contaminated with chunks of bisque from previous use. Also, each time you roll a piece, water is removed from the glaze, causing it to thicken. When glazing with C-110, purples will be vibrant and beautiful. However, when using a non-toxic formula (SC210), you may experience some fogging and hazing. The raw materials used in purples can react with non-toxic formulas.

NON-TOXIC PRODUCTS FOR GREENWARE

Underglazes: One-Stroke Translucent Underglazes™ and Opaque Underglazes

Originally underglazes, refer to ceramic colors used under-the-glaze, like a foundation. Now the term generally refers to a product put on greenware that is covered with a clear glaze. Underglazes can be translucent or opaque. Opaque

underglazes are generally used for large solid area coverage. They are opaque and will block out other underglaze colors over which they are applied. Underglazes are occasionally used in a specific technique with no covering glaze. The translucent types are referred to as One Strokes and are usually covered with a glaze as well.

The use and application of both opaque and translucent underglazes are varied. They can be intermixed in each separate category or intermixed between the two. Many times the two categories can be interchanged in techniques but require an understanding of their basic properties. An oversimplification is: Opaque Underglazes are mostly clay with pigment; One Strokes are mostly pigment with little clay. The amount of clay determines the opacity of the product and requires the product to be applied to the greenware so that the products shrink at the same rate as the clay in the firing.

Underglazes can be used directly from the jar, but should be put out onto a tile to avoid possible contamination of the remaining product in the jar. Make sure the consistency is like melted ice cream. Dip a dampened, blotted brush into the color. Fully load the brush without dragging the brush on the side of the tile. Apply the color in a flowing motion; if it starts to drag, reload the brush. The clay will absorb the moisture from the color, so care has to be used when applying. As you flow the color on, avoid ridges and runs. Brush these flaws out as you apply the color. On an embossed piece do not allow excess color to build up. Brush the excess out of the crevices as you apply the underglaze. Apply the first coat. When the dark wet look has disappeared, apply the second coat at a right angle to the first. The third is then applied at a right angle to the second coat. This will assure better coverage.

There are other methods for applying opaque and translucent underglazes. Sponging and spattering are two other common means of application.

General Application of Opaque Underglazes

- Non-toxic
- Apply to greenware.
- Lightly dampening the ware with a moistened sponge before painting allows better adhesion to the ware.
- Shake the jar well before application. Product should be the consistency of melted ice cream.
- Apply with a soft brush. Use the largest brush to cover the area. Can also be sponged or spattered.
- Apply three smooth even coats. Four coats are required for UG-84, UG-85, and UG-86. The coats are applied at right angles to one another.
- Do not thin for general application.
- All colors are intermixable.
- Can be tinted with One Stroke™ Translucent Underglazes.
- Fire to shelf cone 04. Can be high-fired. Check the High Fire Guide for stability at higher temperatures.
- Clean brushes with Brush Cleaner and warm water.
- Thin with AC-304 Media or water.
- Generally a glaze finish is applied after firing to bring out the true color and vividness of the product. Opaque Underglazes are not true color out of the jar, making them more difficult to design with.

Polished Underglaze Technique

While opaque underglazes can be applied to ware in many ways from brushing to sponging, there is an interesting technique that is very old. One of the most striking looks can be achieved by polishing the surface of the color to produce a soft sheen, and then leaving it unglazed. The finished surface resembles earthenware. This technique cannot be obtained by any other method and is unique to opaque underglazes.

The beautiful surface is achieved by buffing the opaque underglaze while it is still damp. While the surface is somewhat sealed, it will not be waterproof. The surface can be sealed using AC-301 Repellent Sealer for easier cleaning.

This technique is only used on decorative items and is not suitable for surfaces that come into contact with food or drink. This technique creates a great background for spot glazing using a gloss or satin matte glaze. Design work done in translucent underglazes can be completed and then spot glazed on the design giving a contrast of texture and surface.

A smooth surfaced piece works best for polishing underglaze rather than an embossed piece. Care must be taken to avoid removing the color from sharp angles and rims. It is easy to scratch the ware accidentally with your fingernails, etc. Be careful when applying the color as any ridges or buildup of color will affect the end result. Use a silk sponge to apply the color to eliminate some of these problems and to give a different look. Some colors polish better than others do. Those that dry with a frosty look give less successful results. For example, Mayco's UG-33 Redwood works beautifully; UG-27 Pomona Green is very difficult to polish.

The following method is the most fool proof for beginners and can also be used for colors that do not polish easily.

- Apply three coats of underglaze with a brush, in the usual manner, to assure all over coverage. Apply the colors very evenly and smoothly. Do not allow prolonged drying time between the coats.
- Thin the same color, half-and-half, with AC-304 Media and mix well. Prepare a ball of soft facial tissue or soft T-shirt material.
- Apply the thinned mixture to a small area about the size of the palm of your hand. When the shiny wet look disappears and the color will not stick to the pad, polish that area briskly. The pressure should be light and the movement fast. It is the friction from the polishing that develops the sheen.
- Continue to apply the diluted color mixture to a small area at a time, each one slightly overlapping the previous one, until all of the piece has been polished. Now buff the entire surface again, without wetting, until a high sheen has developed. If the color looks blotchy, this will disappear as the piece dries.
- If you wish to add a design using other opaque underglazes or translucent underglazes, be careful not to mar the surface. Use a soft cloth to hold the piece to protect it from body oils and moisture. Wait until the piece has thoroughly dried before tracing the design so the pressure of the transferring does not mar the surface.

If a design is being added with White Foam or any other type of glaze, properly firing the piece to shelf cone 04 before adding the design will avoid problems.

For UR-90 Bright Red and UG-151 Fire Engine Red, see the description under Specialty Glazes on page 33.

Translucent Underglazes: Translucent One-Stroke™ Underglazes

One Strokes are translucent underglazes that have a light, airy look and concentrated color. These translucent underglazes appear almost the same color in the bottle as on the finished piece. This allows mixing, shading and blending with them to be done with minimal complications. They can be compared to the artist's watercolors. The "see-through" characteristics of translucent underglazes allow shading of one color over another to achieve depth and dimension. Translucent Underglazes are not intended for large area coverage. Requiring only one coat, they are excellent for design work, two-tone shaded techniques and accents.

As the name states, One Strokes infers one stroke of the brush. When multiple colors are applied, the thinning of the color and thinner layers of the product allow the product to be used to its full advantage. The thinning of the One Strokes and the amount of the application is adjusted to the number of times a color is used on a given area. The final depth of color should be no more than a generous stroke of the brush with unthinned One Strokes.

It is important to thin One Strokes to the proper consistency for the type of work being done. Concentrated translucent colors are designed for relatively thin applications that naturally result from one brush stroke. Very heavy applications of color can lead to problems with dry areas, cracking or bare spots where the One Strokes may pop off, taking the glaze with it. Bleeding of darker colors of blue and black may occur, but is generally the result of not firing the color before glazing or too heavy an application of the top glaze.

When applied too thinly, the color will seem to disappear under the topcoat of clear glaze after firing. The One Stroke has to be thick enough so that the top glaze does not "cannibalize" it. Thinning with water minimizes the danger of too heavy an application, but over-diluting can cause the loss of color. Mayco AC-304 Media can be used with water or alone to thin color for brush strokes and sponging. Media helps suspend the color without diluting it. As a rule, darker colors can withstand more thinning than lighter shades.

For airbrushing bright red oranges and purples, it is more effective to thin colors using media.

(*Mayco does not recommend spraying or airbrushing ceramic glazes and underglazes. In any case, do not spray apply ceramic products without proper OSHA approved respiration equipment.)

Use a palette knife to thin the color to the consistency of light cream for most applications. The consistency of very light cream is recommended for banding wheel work and decorating over unfired glazes. A wash of color, spattering or full brush shading over one color with another color would use a product thinned to the consistency of milk. With practice you will learn the feel of the product in its various uses.

General rules for One Stroke application are:

- Non-toxic
- One Strokes are generally applied to greenware. They are sometimes applied to bisque, for special techniques such as color washes, Majolica or on top of an unfired glaze.
- Dampen the greenware slightly before applying.

- Shake bottle well and thin with AC-304 Media or water. The consistency of the product depends upon the technique being completed.
- Use a quality decorating brush for applying.
- Can be intermixed to achieve more colors.
- Use to tint opaque underglazes, glazes and slip.
- Bisque fire to shelf cone 04. Product can be high-fired up to shelf cone 6, check high fire chart for stability at higher temperature.
- Clean up using AC-525 Brush Cleaner and warm water.
- Generally a glaze finish is applied after firing to bring out the true color and vividness of the product.

Brushing One Strokes

Because of the translucent quality of One Strokes, the direction of the brush stroke is apparent. This makes them ideal for artistic detail work and designs.

Although One Strokes are not designed for solid coverage, generally they can be used satisfactorily on large areas if applied properly. Thin the color to the thickness of light cream, apply with a flat brush sized for the area. More than one coat of color thinned properly will produce a more opaque look.

Sponging One Strokes

A sponge can be used in a variety of ways with One Strokes, achieving a totally different look each way. Choosing, loading and using the sponge is the same as described for opaque underglazes, but the similarity stops there.

Unlike the opaque underglazes that block out beneath, One Strokes allow every overlap of the sponge to show. Sponging of the piece should not be so concentrated with color so as not to allow the bisque to show. This light or airy look is accomplished by choosing a sponge with a specific pattern to it and rotating the sponge with lighter mixtures of color allowing the bisque to show through. Several colors can be blended into the sponge at a single time to give a wider variety of decorating possibilities.

Usually One Stokes are thinned to the consistency of light cream for sponging. The color can be thinned to the consistency of milk, allowing for a two-toned value of the same color. Generally darker colors can be thinned more than lighter shades. Darker shades will block out lighter colors underneath, while lighter shades applied over darker ones gives a shadowing to the area. Blending of the colors from dark to light is preferred. Blend the colors into the sponge and test on a piece of paper to see how the colors intermix.

Color Washes and Antiquing (Wash-Away)

This technique is done on bisque – whether it is soft bisque shelf cone (018-022) or hard bisque (shelf cone 04.) Each has their advantages, but hard bisque is the preferred type to use in most techniques. Whichever bisque is used, use little water while cleaning the greenware to reduce unwanted erosion of the surface. When using the harder bisque, dampen the surface with water so the color is more even in tone. When using softer bisque for antiquing, re-fire the ware to shelf cone 04 before glazing.

The wash mixture should be the consistency of non-fat milk or water. It is

then applied to the embossed area where it flows into the recesses and crevices. Use a large brush so that the color is even. The color will have a natural tendency to be darker in the recesses while automatically highlighting the embossed areas. Mixing the One Stroke with Media will not allow the color to thin out enough.

When antiquing, color is applied and then removed from the high points with a damp sponge, leaving color in the recessed areas. Color should be thinned to the consistency of light cream using AC-304 Media and applied using the largest brush possible for the area. If the color is too thin, it will run and penetrate and stain the bisque. When the color is too thin, it has a tendency to weaken the color and can cause the color to shiver off after firing. If the color is too thick, it will not get into all of the embossed areas and can actually repel the top coat of glaze during the firing. Applying one coat of AC-304 Media to the surface before the antiquing is applied will aid in making the color more even in tone.

Allow the color to dry before removing it from the raised areas with a damp sponge. Follow the contour of the design on the piece. Wiping the wrong direction will cause you to remove too much color. Rinse the sponge often to keep the highlighted areas crisp and clean. Too much pressure on the sponge will remove excessive amounts of color. Persistence, not pressure, is what does the job effectively.

Antiquing over a fired underglaze can be very attractive. This can be done to a piece that has had several colors applied to the surface. This ties the piece together for an even look. The underglazes should be properly fired to shelf cone 04 before doing this technique. Antiquing done alone with a clear glaze is very effective, but can also be done with a speckled or clear art glaze. Darker colors used under semi-transparent color offers the artist a wider range of decorating possibilities. Remember the top glaze will mute the underlying color. Darker shades are most often used for this purpose.

Astro Gem® Textural Glazes

Characteristics:

Astro Gems are non-moving textural glazes that contain two sizes of tiny crystals. When fired these crystals provide jewel-like spots that compliment and enhance the stone type or dead matte surface of the glaze. These unique glazes can be applied to greenware or bisque. For the best results the glazes are applied to greenware. Applying these glazes to bisque require more drying time between coats.

Application:

- Non-toxic.
- Apply to greenware or bisque. Greenware preferred.
- Apply using Oval Mop or Soft Fan.
- Apply three even coats, crossing each coat at 90 degrees.
- Can be intermixed for other shades.
- Do not apply inside of food containers.
- Fire to shelf cone 04.

Stir and shake well to disperse the crystals before applying. Apply three full coats, changing direction with each coat for better distribution of the crystals. Avoid heavy application in recessed areas of detailed pieces. Any puddles should be brushed out before the glaze dries.

The firing range of these glazes is shelf cone 06, but they can be fired even higher to shelf cone 6. Refer to High Fire Guide. They become darker the higher they are fired. Should these glazes require touch up, re-fire to at least the original cone or higher to achieve uniform color.

Notes:

- AS-518 Amethyst requires a special method of application because some of the crystals may appear as light spots. It is suggested one full coat of UG-10 Crimson opaque underglaze be applied to the greenware, then three coats of AS-518 Amethyst Astro Gem.
- Most any color can be made by intermixing the Astro Gems or by adding One Strokes translucent underglaze to AS-510 White Opal Astro Gem.
- When applied to greenware or bisque, remember to stilt the piece. If you wipe off large crystals after application of each coat, the piece need not be stilted.
- Seal with AC-301 Repellent Sealer for a water-resistant surface. See the accessory chapter for application and usage of Repellent Sealer.
- Decorating ideas are almost endless with Astro Gems. Over these unfired glazes you can decorate with One Strokes, Underglazes, White Foam, Clear Glaze, Stroke and Coat, and other Astro Gems. Products used over fired Astro Gems are Specialty Red Glazes and Non-Fired Softies Acrylic Stains. AC-302 Wax Resist and AC-303 Mask are natural to use when doing many techniques.
- OV-3 Mother-of-Pearl can be applied over fired Astro Gems. Though it fires out of the porous background, the tiny crystals will have a high iridescent reflective sheen. There may be some background color change on certain Astro Gems.
- To use fired gold over Astro Gems, apply and fire clear glaze on the area where gold is desired.
- Astro Gems are non-toxic, but their porous surface makes them unsuitable for items intended for food and drink. However, they can be used on the outside of storage containers. Because porous surfaces are difficult to clean when soiled, the surface should be treated with AC-301 Repellent Sealer when the project is completed.
- Most of the colors are stable when fired to shelf cone 6. The surface becomes vitrified and the background develops a slight sheen. They can be applied to either porcelain or stoneware.

GLAZES FOR BISQUE

Clear Glazes

Characteristics:

Mayco offers a wide selection of clear glazes. These glazes are shiny glazes that enhance the translucent and opaque underglazes as well as the Stroke and Coat line. Both brush-on and dipping glazes are available for everyone from the hobbyist to the commercial potter.

Generally the clear brushing glazes require only two coats unless a fired metallic

is to be applied over them. If a fired metallic is applied over the clear glaze, a third coat of glaze is recommended.

There are five different types of clear dipping and each has special considerations and performance standards. These subtle differences are based on the needs of the consumer. Always refer to the instructions on the jar label before use.

Application:

- The general instructions for brush-on type clear glaze is as follows:
- Apply to properly fired shelf cone 04 or higher bisque.
- Apply 2 coats unless noted differently on the jar. Use three coats when fired metallics will be used over the clear glaze.
- Use an Oval Mop or Soft Fan brush for applying glazes.
- All produce clean shiny surfaces, excluding the clear matte. Each has it's own personality as to brushability.
- All are food safe when properly applied and fired to shelf cone 06. Some are Non-toxic. Check labels in this series for toxicity.
- May be high fired up to shelf cone 6.

Jungle Gem™ Crystal Glazes

Characteristics:

Crystal glazes are an exciting array of colored glazes that “explode” with jewels of color during the firing process. They consist of a base glaze with pebbles, granules, and specks of contrasting glazes. During the firing, the crystals spread out to produce a burst of color. The base glaze may be gloss or matte; the crystals may be the same type of glaze or a contrasting type. In any case, the mixture is designed to melt and smooth out in the firing. Crystal Glazes are a lead-bearing glaze and should not be confused with the non-toxic crystal glazes called Crystalites.

Application:

Most crystal glazes require three coats. Crystal glazes that have a red glaze base should have four coats. Regardless of the base glaze, if enough of the glaze is not applied, the crystals will not melt into the surface. It is easier to get a good coverage of the base glaze if all but the last coat is applied without the crystals or with fewer crystals. Usually the crystals are in the bottom of the jar, so it is easy to put the base glaze into a container.

Apply the first two coats in the usual manner with a soft fan brush. Mix the crystals into the remainder of the glaze and apply the last coat with crystals; a fan brush is helpful when applying the last coat for even disbursement of the crystals.

While glazing, continually stir down to the bottom of the jar to pick up the crystals that may have settled. Larger crystals should not be placed where they can spread out toward the bottom of a piece. Large crystals in the bottom of a bowl cannot spread out as easily as they would on the outside of the bowl. Avoid too many crystals near the bottom of the piece. The application of too many crystals on a piece can cause it to split. A piece is unattractive with too few or too many crystals.

- Apply to properly fired shelf cone 04 bisque
- Use a soft fan brush to apply the first two (or three) base coats and to apply the final coat to disperse the crystals evenly.

- Fire to shelf cone 06. If more flow is desired, fire to cone 05.
- Avoid a larger concentration of crystal towards the bottom of the ware.
- Do not use on the inside of food containers.

Notes:

- A plain vertical shape, glazed with the base glaze, looks great if crystals are placed in a heavy “necklace” around the top of the piece, resulting in a cascade of multi-colored crystals flowing down into a field of plain color.
- Crystal glazes can be used in glaze combinations with great results. If two glazes from the 700 Series are used in combination, a total of four coats give the best results.
- Many of the crystal glazes can be high fired up to shelf cone 6 with interesting effects. This information can be found in the High Fire Guide. Individual tests should be made to insure the best results.

CG-730 Clear Enamelware

Characteristics:

Clear Enamelware is a clear based glaze with a white crystal that does not flow in the firing. It is designed to be used over a fired underglaze to resemble spattered tin enamelware.

Application:

The underglaze is applied to the greenware in the usual manner and fired. Two to three coats of Clear Enamelware is applied over the fired underglaze and the pieces re-fired to shelf cone 06.

Suggestions for traditional enamelware are; UG-1 Kings Blue, UG-31 Chocolate, UG-21 Leaf Green, UG-73 Cobalt Black or UG-58 Harvest Gold.

Art Glazes

AG-200 Series

Characteristics:

All the glazes in the gloss series are pretty well described by the individual color name and the term “gloss.” The user needs only to check out the dinnerware (food safe) quality and opacity of these glazes before using them.

Application:

Apply three full flowing coats unless noted differently on the jar.

Notes:

- Apply smoothly to plain surfaces to avoid a spotty look.
- Pale colors applied too sparsely will look more like clear glazes.
- Transparent and Semi-transparent glazes accent embossed designs.
- All glazes work well in glaze combinations and can be applied in one, two or three coats for this technique depending on the strength of color desired.

AG-400 Series

Characteristics:

The term “art glaze” is usually used as a catchall to describe any glaze that produces a lustrous finish, dual coloring, multi or single colored specs, gold or metallic flecks, or a grained or metallic look. Art Glazes have exciting two or three tone color with both matte and gloss finishes, sometimes in the same glaze! Art glazes can be used side by side with good control, though a slight diffusion of color can occur when too much glaze is used on a vertical surface.

Application:

Apply three flowing coats of glaze. An uneven application will produce more two toned color variations.

Notes:

- Shape of the piece, thickness of application, and the firing rate and temperature will affect the glaze.
- Apply smoothly to plain surfaces to avoid a spotty look.
- Re-firing will give more color formation to the two-toned colors.
- Art glazes are great for creating new effects when used in combinations.
- Apply one, two, or three coats of glaze under, over, or between other glazes for interesting variations.
- 410 Black Lustre produces a mirror-like brilliant surface. It may run off the high areas or heavily embossed areas. A soaking cycle at the end of the glaze firing will enhance the metallic sheen of this glaze.

AG-460 Empress White

Characteristics:

AG-460 Empress White is rightfully an Art Glaze but is different due to the fact that it flows more freely during the firing. The movement in firing produces a silvery thread of color, changing from gloss to matte, and pools in recessed areas of embossed ware.

Application:

While three coats produces a beautiful color an extra dabbing of color here and there will produce more of the metallic-looking color to change. The third coat should be tapered back, slightly, from the bottom of vertical pieces to reduce the chance of drips. Care should be given when using Empress White next to other glazes to prevent them from mingling.

Notes:

Empress White is especially versatile. If used alone, it produces an off-white color, almost ecru, with just the right amount of color variation for shading on clothing or dogs and other animals. If used over underglaze colors, such as dark browns and Redwood, the flow of the glaze adds iridescence to the finish. If used in combination with Matte Transparent over One Stroke colors, it produces tiny brown threads that add to the detail of the design. Empress White works well in combinations using one, two, or three coats over, under, or between other glazes.

AG-601 White Drape & CG-712 Super Spill

Characteristics:

These two glazes are not intended to be used alone. They are free flowing glazes used to produce special effects or flow patterns when used in combinations with other glazes. White Drape forms a cascading water effect when used alone over a glaze applied heavily at the top of the piece. It will form runs or you can direct the runs when you apply the product. Depending on the glaze underneath, the White Drape can blend with the color creating a tint to the special effect glaze.

Super Spill is similar to White Drape but has an added crystal. These white crystals form bursts of white spots mottling the special effect glaze and the other glazes used in combinations. Better results are obtained when used either as the first or second coat in the glaze combination. When applied as the top coat, the effect is less dramatic.

Application:

Usually these glazes are applied with a brush in 1-3 coats. AG-601 can be applied using either a sea wool sponge, Chore Boy or Tuffly™ sponge. Either can be dabbed on at random, even or unevenly to create different flow patterns.

Notes:

- Can be applied between colors, underneath and over colors for break-up effects.
- Shape of the piece affects the performance of the glazes.
- Firing temperature, ramp rate and a soaking period may enhance the flow patterns.
- Avoid excess color toward the bottom of the piece to prevent drips from forming on the bottom of pieces.
- Both can be used in combination with Jungle Gem Crystal Glazes to add more flow and color variations.
- Do not use on the inside of dinnerware pieces.

AG-605 Gold Filigree, AG-630 Opaque White, AG-585 Tesserae

Gold Filigree

Characteristics:

Gold Filigree is a metallic looking glaze that resembles a beautiful gold, mirror-like finish with delicate lacy threads weaving through it. The lacy pattern is more pronounced with heavier applications.

Application:

Apply three to four full, flowing coats to properly fired shelf cone 04 bisque.

Notes:

- Cannot be fired to a lower temperature cone and retain its mirror-like finish. The higher firing produces the glaze surface and any less of a cone will affect the glaze. A luster firing removes the lustrous mirror finish to the glaze.

Opaque White

Characteristics:

White Opaque is a white gloss glaze that resembles expensive white opaque glass. It covers imperfections in bisque and works well with decals and fired metallic lusters.

Application:

Apply three even flowing coats.

Tesserae

Characteristics:

Tesserae is a unique textural glaze that forms a raised rectangular chip-like texture. This white opaque glaze can be used to save fired pieces with mistakes or flaws in the final glaze finish.

Application:

- Apply to properly fired shelf cone 04 bisque. After application of Tesserae, allow to dry and fire to shelf cone 06.
- Apply over any moving glaze, fired or not, or any underglaze surface. Sometimes an extra coat of the underlying glaze is needed. This is because the color can have a tendency to absorb the underlying glaze.

Notes:

- Handle the ware carefully as the dried Tesserae has a tendency to flake off. Pieces of color that fall off may be reapplied to the ware using AC-302 Wax Resist. A protective coating of AC-302 Wax Resist can be applied over the color to help alleviate the flaking of the product.
- The application, drying time before firing, the method and temperature of the firing will impact the final finish of this product.
- One Stroke can be used to apply designs or tint this product as well.

AG-610 White Foam and AC-308 Fired Snow

Characteristics:

White Foam develops fine bubbles during the firing, resulting in a foam-like, snowy texture. Foam can be used for designs and dimensional scenes, hills, snow banks. Foam maintains its position when used over non-moving matte glazes in the Series 2000 Glaze line. Foam can be used alone or for all over coverage as a background.

Application:

The general rules for applying both glazes are as follows. More specialized applications are described below the following bullet points:

- Apply to properly fired shelf cone 04 bisque. It can also be applied to greenware.
- Apply with a brush or sponge.
- Fire to shelf cone 06 to 04.
- Can be glazed.

Notes:

- Three even coats can be applied with a brush or for a better and more even texture of the glaze, apply with a silk sponge.
- Once the glaze is fired it can be used for a textured background for China paints, overglaze metallics or overglaze lusters and stains.
- Can be tinted with One Strokes to form different colors. Use darker colors for tinting to avoid diluting the glaze.
- When using with another glaze that meet, apply the first coat of White Foam overlapping the applied other glaze. Foam has a tendency to pull into itself, which would leave a bare spot if this is not done.
- Lusters and fired metallic can be used over the fired glaze.
- Non-fired acrylic stains, opaque or translucent may be used over foam after firing for a different look

AC-308 Winter Snow

AC-308 Winter Snow is applied to greenware or bisque with a palette knife, brush or sponge depending on the thickness and the texture desired. This glaze is formulated to be thicker than normal so a heavier application will be easy to obtain. In most cases, one heavy frosting type application is sufficient for small areas. If applying to large areas or on bisque, it is recommended to apply one coat of clear glaze to the surface before applying the Winter Snow. Two coats of glaze may be applied to larger areas or where a fluffier texture is desired.

Notes:

- Winter Snow will produce a more fluffy, snow-like appearance. It is perfect for Christmas decorating projects. This bubbly glaze will foam to a fuller texture the heavier it is applied. This product was specifically designed to use for snow-like accents on Christmas trees and winter decorations.
- AG-454 Holly Green can be used and will not boil up into the Winter Snow, discoloring the snow areas.

Clear Art Glazes

Characteristics:

The glazes in this series are not totally clear, but are ideal for use over Opaque Underglazes and One Strokes. They may be applied to the bisque to produce a soft color, only tinting it or it can be applied heavily to give a bit more color depending on the glaze used. These glazes offer no significant color contribution.

Application:

- Apply two coats when used over underglazes. Three coats on plain bisque in an overall color.
- Fire to shelf cone 06. Some may be high fired. Check High Fire Guide for color stability.

Notes:

- Two coats of glaze are sufficient over underglazes; too much glaze will eat up the underlying color. When these glazes are used alone, three coats give more depth of color.
- Heavy applications of clear glazes have a tendency to craze.
- All of the clear art glazes are dinnerware safe when applied and fired properly to shelf cone 06.
- Some have a speck of color in them to add more interest to the glaze. These specks can be of different colors.

Bisque Glazes and Utopia Glazes

Characteristics:

Bright red and orange colors are very popular with ceramists, but these colors should be handled properly. Certain metal particles, raw clay or clay dust, salt, and other foreign matter can discolor bisque glazes. If reds and oranges are diluted or if they are not applied heavily enough, they will look white, gray or clear. They must receive plenty of oxygen during the firing process to prevent discoloration.

Application:

When using Bisque Glazes, extra care should be taken. The bisque, the glaze brush, and the hands should be clean. The bisque should be properly fired to a shelf cone 04 in order to burn out any foreign matter in the clay that could later discolor the glaze during the glaze firing. Bisque glazes should be used on pieces that are free from sharp edges or embossing. Red glazes have a tendency to pull away from sharp corners; therefore, red glazes may have a white trim if the corners of the piece are not rounded.

- Apply to properly fired shelf cone 04 bisque.
- Apply four full flowing coats, allowing each coat to dry between applications.
- Utopia glazes only require two to three coats of glaze.
- Apply an extra coat to high areas for better coverage. On highly embossed or sharp edges the color may run off and produce a gray highlight.
- Make sure hands are clean from body oils and salts.
- Make sure the brush is clean.
- Wipe down the bisque with a clean damp sponge to make sure all dirt is off the ware.
- After application of glaze, allow to dry and fire to shelf cone 06.
- Allow extra room around each piece in the kiln for firing of pieces with red glazes. They need breathing room for the glaze to develop. They need space, oxygen and ventilation in order to achieve the desired color.

Notes:

- Bisque Red or Utopia glazes are compatible with each other and can be fired with any of Mayco other glazes without any discoloration. Some other glaze companies' products in the kiln could affect the red glaze.
- Red glazes should not be used on the inside of food or drink containers. Due to

the delayed crazing aspect of the glaze, they should not be applied to the inside of a container that would hold any liquid.

- Vibrant Red is semi-opaque and allows designs in black to show through. The look of Flambé ware is a technique done with the design done in black one stroke, fired and the red glaze applied over it. The design is obscured, but does recreate the look of the Flambé ware.

Specialty Glazes

UR-90 Bright Red and UG-151 Fire Engine Red

These underglazes are really not underglazes but very stiff glazes that require a top coating of clear glaze to achieve a bright shiny quality. These two colors must be applied to properly fired shelf cone 04 bisque.

- Apply 3 to 4 even coats. Allow each coat to dry well between applications.
- These colors can not be intermixed with any other type of underglaze product.
- These products are Semi-Opaque, allowing only dark colors to show through.
- Apply one to two thin coats of a clear glaze on top of the unfired product. The use of BS-100 Brite Strokes Clear glaze will make both UR-90 and UG-151 food safe.
- Glaze fire to shelf cone 06.
- These colors do not withstand high fire temperatures.
- Perfect for small spots of color in a design, such as fruit.
- Clean up with water.

Brite Strokes Clear Glaze

Characteristics:

This glaze was specifically developed to be used over Specialty Underglazes, UR-90 Bright Red & UG-151 Fire Engine Red to promote the color stability of the underlying color. It is applied over Specialty Glazes in order to make them food safe.

Application:

Apply to properly fired shelf cone 04 bisque using a soft glaze brush sized for the area. Apply two coats for proper glaze application.

Notes:

- This glaze may discolor regular underglaze colors. A test should be made for color stability.
- When decorating with the Specialty Glazes, the Brite Stroke Clear glaze is only applied to the area that is painted with the Specialty Glazes.

Exotic Glazes

Characteristics:

Each Exotic glaze is so strikingly different that “Exotic” is the only word that adequately describes them. Their pattern development will depend upon many variables and as a result no two pieces will look exactly alike. The shape of the object, application, firing temperature, kiln load, and the firing time all will affect the flow patterns of these glazes. With the application of three even coats and the usual cone 06 firing, these glazes do not flow out of control, but move within themselves enough to

result in a pleasing effect.

A heavier, uneven application, a heavily loaded kiln, a thick walled kiln that holds the heat longer, any soaking period, or a prolonged firing will develop a more intricate pattern with Exotic glazes. Re-firing will also bring out more of a pattern change with the underlying color. Some shift from gloss to matte to develop a frosted look; some produce a flow of two, three or more colors; others contain specks. The fired color chips are usually too small to show the lovely true characteristics of Exotic glazes.

Application:

- Apply to properly fired shelf cone 04 bisque.
- Using an Oval Mop, apply 3-4 flowing coats for general application.
- Fire to shelf cone 06. Can be high fired up to shelf cone 6.

Notes:

- The shape of the piece, glaze application, firing temperature and kiln load all affects the final surface.
- Exotics are great for fur and animals.
- Can be used when doing glaze combinations to aid in the flowing pattern.
- Embossed pieces can contribute to the flow of the glaze during firing.
- E-850 Milk Glass is a beautiful glaze applied alone to give that subtle blue cast like fine glass objects. Milk glass can be applied over underglazes to “milk” the underlying colors to give an attractive result.
- E-944 Taffy is a crackle glaze and the instructions for Classic Crackles should be followed for the application and firing of this glaze. However, this glaze contains lead and should be used with other leaded products. Refer to page 12.

Overglazes: Fired Lustres and Metallics

Characteristics:

In the language of ceramics, the term “overglaze” refers to the group of colors (lustres and metallics) that are applied to a previously glazed and fired surface. These overglaze materials are then fired to a temperature considerably lower than the original glaze firing.

General Application and Firing Information:

Proper overglaze decorating begins with the greenware. Greenware that will eventually be overglazed should be cleaned carefully and bisque fired to shelf cone 04. This encourages the dissipation of gases that might otherwise cause imperfections in the overglaze and also makes crazing less likely. The areas to be overglazed are then glazed and fired to maturity. The firing should be to the highest temperature recommended for the glaze of your choice. The label will tell you whether a glaze is overglaze compatible. If the jar label states that the glaze is not overglaze compatible, in some cases this only means the glaze will change during the overglaze firing. The metallic luster will be cloudy and may look beautiful in combination with the glaze used. While the finish may not be what was anticipated, that does not mean that it is not complimenting the piece or glaze. If a certain glaze is in question, we recommend you test fire the color first. Keep in mind that

a matte glaze will provide matte finish to the luster or metallic, and a gloss glaze will furnish the glossy finish more commonly associated with overglazes.

After glaze firing, the overglaze decoration is applied. Firing temperature for all Bright Gold is shelf cone 018 or 723° to 752° F. In firing an overglaze, the glaze is softened to the point where the overglaze settles onto the softened surface and becomes a part of that surface. Overfiring will cause the colors to sink deeply into the glaze resulting in distortion, fade-out, burn-out and possibly a break up of the surface color. Underfiring will prevent the glaze from becoming soft enough to receive the color causing poor adhesion. With proper firing, overglaze decoration becomes a permanent part of the glaze, and provides a durable, lasting finish that cannot be obtained with any other decorating medium.

Fired Gold

The best known of the overglaze decorations is Bright Gold, which is a solution of true gold in solvents and oils. The popularity of this decoration is based on the rich, elegant finish it provides. Since there is great similarity in colors between the unfired solutions, especially the metallics, care should be taken to make sure you properly identify the product being used. Use a permanent marker to label all jars and lids for identification.

The piece to be decorated and the work area must be thoroughly clean and dry to avoid contamination of the piece while applying an overglaze. The piece should be cleaned with a lint-free cloth. If alcohol is used as a cleaner, be sure to allow sufficient drying time. Some alcohols contain water and oils. Always check labels when purchasing. If water does not dry completely, an imperfection will result in the overglaze.

When a piece that is to receive overglazes comes out of your kiln, use a coffee filter to grasp and remove the ware from the firing chamber. The piece should be stored in a plastic bag away from dust and lint. Brushes should never be cleaned with alcohol since the inner bristles will tend to hold water. Coughing, sneezing and the presence of cigarette smoke can also put moisture on the object causing imperfections.

Overglazes may be applied with a brush, sponge, stamp or almost any other method to obtain the desired finish. Brushing is the most popular application technique and should be undertaken with a high quality soft natural hair brush. Application is best done with the largest brush sized to the object being decorated.

The general instructions for applying a metallic luster are:

- Apply to a clean and dry piece, free from lint and dust. Remove pieces from the kiln using a coffee filter for handling and store in a plastic bag until ready for overglaze decoration.
- Use a high quality brush reserved for that specific metallic. A camel hair brush works best for all-over decorating of any fired luster. Synthetic Taklon brushes are soft and versatile, making ideal detail and liner brushes. Taklon brushes are too stiff for all over application of metallics. Camel hair brushes are good for all over coverage of Mother-of-Pearl.
- Fully saturate the brush but not completely up to the ferrule. Remove excess color. For proper coverage the color of the product on the piece generally should be half as dark as it appears in the jar. Fired gold will appear a toasted honey

color on the piece while the color in the jar is like dark molasses. This is true for all the metallics. Mother-of-Pearl, however, is usually applied thinner.

- Fire to shelf cone 018 for metallics.
- Clean brushes in OV-6 Essence using a double bath system. The paragraph below contains more information about this system.

The brush should be well saturated with the excess product worked out of the bristles. Proper brush technique is important in overglaze decorating. Each stroke should be firmly and evenly placed next to the last one in an effort to make the application as even as possible. Where an even edge is required, or the decoration is to be applied to a raised or embossed surface, the overglaze may be allowed to air thicken slightly. This slight thickening can help where added brush control is desired, such as when decorating very small areas. The product is allowed to air thicken on a tile or glass. If the product becomes too thick, add (OV-6) Essence one drop at a time to avoid over-thinning. Essence (OV-6) is used as a thinner for the metallics.

Brushes used for metallic overglazes should be kept thoroughly clean and protected from contamination between uses. It is highly recommended that one brush be set aside for each metallic preparation and marked. We suggest that one set be used for fired gold and one for Mother-of-Pearl. A brush used for Mother-of-Pearl should never be used to apply any other product. The slightest bit of gold in a brush will discolor the Mother-of-Pearl.

The most desirable preparation for cleaning brushes is OV-6 Essence that has solvent properties to thoroughly remove metallics as well as conditioning properties for the brush. Alcohol is not recommended for the reasons stated previously. This is the recommended procedure for cleaning metallic brushes:

- Divide a small amount of Brush Cleaner into two portions and place in glass containers.
- Mark each container with appropriate name and number them Cleaner #1 and #2.
- Before cleaning, press the brush in a paper towel between your fingers to remove excess remaining luster or metallic. Do not squeeze the bristles and pull on the handle of the brush at the same time.
- **Bath #1.** Gently dip the brush in cleaner. Do not swish the brush. Gently press the hairs between the fingers and paper towel again but do not use a pulling action. Continue repeating this process of dipping and pressing the brush 5 or 6 times. The color in the paper towel will either be almost gone, very light, or color free in the paper towel by the last dipping. This bath will become discolored more quickly than bath #2 and should be changed when needed. Go to bath # 2, to continue the cleaning process.
- **Bath # 2.** Now swish the brush into the cleaner and press the brush into a paper towel as before. This is repeated until all color is gone from the brush. Over time this bath will start to take on color and need to be replaced. It should be almost clear for a long period of time.
- Store the brushes in a closed container away from dust and lint. It is a good practice never to dip a brush into overglaze all the way up to the metal ferrule. This only wastes color, makes the brush more difficult to clean, and causes it to break down and lose hair sooner.

Sponge application is done with slightly thickened metallic. The thicker prod-

uct will hold the sponge pattern better. Use a new small piece of a natural sponge for the application and discard it after use.

Stamped application can be done with fired metallics using a rubber stamp that has only been used with metallics. Use product that has been slightly thickened and spread out evenly onto a tile or glass surface when stamping. For proper coverage, you will need to replenish the product often.

Mother-of-Pearl creates a beautiful iridescent effect and is one of the most popular overglaze finishes. A successful outcome can be assured by proper light application of the product. Unlike colored lusters and metallics, Mother-of-Pearl should be applied unevenly. This is best accomplished by swirling or stippling with the brush during application. This luster is most commonly applied directly over a glaze, either clear or colored. The decorator should keep in mind that beautiful and unique effects can also be achieved by applying Mother-of-Pearl over the top of a fired coat of another luster or metallic. Mother-of-Pearl is generally fired to shelf cone 020- 019 for optimum results, but can be fired with gold and other colored lusters at shelf cone 018. The Mother-of-Pearl may sometimes appear frosted at higher temperatures.

Firing Metallics:

There are some general rules for firing metallics that should be followed. Following these steps will provide the best environment for the piece and the colors to develop.

- Pieces should be completely dry and free from dust and moisture.
- Fire to shelf cone 018-019. Mother-of-Pearl does better at shelf cone 020.
- Ventilation is the single most important factor. Allow extra room around and above each piece, about 2-3 inches.
- Stilt each piece for better air circulation.
- The kiln is operated on “low” for 45 minutes with the peepholes removed and the kiln lid fully open. The lid is then lowered to about 6 inches and the kiln is turned up to “medium” for 45 minutes or until all smoke and odors have disappeared. The kiln is then turn on “high” and the lid lowered to about 1 inch. When the kiln is turned off, the lid and peepholes are closed. This will give the optimum results when firing metallics and lusters.

Accessory Products: Fired and Non-Fired

Mayco produces many products that are used with other products to achieve different decorating effects. Listed below are accessory products and their uses. This category of products is dealing with the fired portion of the line. Some of these products are used in both the fired and non-fired lines interchangeably

AC-301 Repellent Sealer

Characteristics:

This product is a silicon based water sealer that is applied to Astro Gems and polished or unglazed underglaze surfaces to protect them from being soiled. Also work very well for non-fired surfaces.

Application:

This product is applied to the ware using a soft brush. Apply 1 coat and let dry for 24 hours and then apply a second coat. This product makes porous surfaces water and soil resistant. It can also be used with polished underglaze piece to make cleaning easier. It is not a replacement for glaze on this surface.

Stain pieces that are exposed to outdoor element can be coated with Repellent for added protection. It can be applied to the inside of lawn ornaments to resist water penetration and allow more weather protection. Clean up is with AC-525 Brush Cleaner and warm water. Do not fire.

AC-302 Wax Resist

Characteristics:

This wax emulsion is one of two resist products used in many fired color techniques. The wax emulsion repels color from the coated area and fires off. If colors adhere to the wax it must be removed prior to firing as it can stick to the ware. This is especially true with any glaze “beads” that may form on the wax. Any color left on the wax that is used on top of an unfired glaze will adhere to the underlying glaze during the firing.

Wax resist can be used on greenware or bisque, under, between or on top of any unfired color, to protect coated areas from color. It can be applied with a brush, sponge or spattered. Each method allows the artist to expand the options in the decorating process. Dramatic Batik effects can be achieved by layering the Wax Resist between coats of color or simply by using Wax Resist as an aid to keep color off an area while painting. A sea wool sponge offers the most varied and dramatic effect to veil the wax and color. Mayco recommends the brush or sponge be preconditioned with AC-525 Brush Cleaner to allow easier clean up. Condition the brush by saturating the hairs. Then remove any excess Brush Cleaner before using the Wax Resist. If Wax Resist should dry in the brush it may be removed using AC-520 Solvent.

Apply one generous coat of Wax Resist. Even a thin coat will repel color. Once an area is coated with Wax Resist a second coat will not adhere to the previous one; it will bead up on the first coat. Once a coat of Wax Resist is applied it can only be removed by firing.

When glaze or color is applied over Wax Resist with an underlying unfired glaze, the “beads” of color need to be removed prior to firing. These can be removed by pouncing a clean, damp sponge over the waxed areas. If several coats of color are being applied, it is easier to remove excess color after each coat rather than letting them dry and trying to remove them all after the final coat. A different effect will result when the beads are allowed to remain during the firing. This option can be used to advantage with some techniques.

During the firing process there is additional smoke that will be given off as the wax is burned off. Allow extra ventilation of the kiln during the early part of the firing to remove these fumes and gases. Remember that because the wax repels the color it can fall off the ware and could land on an adjacent piece. Allow extra room when loading the kiln in case this happens and to allow the carbons to burn off. This product has a tendency to chip when trying to sgraffito through it.

Wax Resist will only repel color during application. A glaze applied too heavily

may run during the firing and Wax Resist will not keep it from moving onto an area.

AC-303 Liquid Mask

Characteristics:

Liquid Mask is a rubbery emulsion that dries as a protective film when applied to greenware or bisque. It can also be used on top of fired or unfired glaze, over acrylic areas that have been sealed, and on fired metallics to prevent the area from being over-sprayed with a sealer. It is not recommended for use over One Strokes on greenware before they are fired. There is a tendency for the color to be lifted off with the Mask in this instance. The difference between this product and Wax Resist is how it is removed after use. Liquid Mask is peeled away when the project is finished and before the firing process. It does not burn away in the firing like Wax Resist. Liquids Mask can be used like Wax Resist for similar techniques. However, Mask is generally applied to areas that need to be blocked out in order for another color to be applied after the first.

Application:

The brush must be “conditioned” before using Liquid Mask. This is done by working a small amount of AC-525 Brush Cleaner throughout the bristles. The brush cleaner is not washed from the brush. This prevents the Liquid Mask from imbedding itself into the hairs of the brush, ruining the brush from any future use.

Be sure to peel Liquid Mask from the ware the same day it is applied. If left too long it is difficult to remove. If for some reason the mask cannot be removed from the piece within a day of the application, apply another coat of the mask and then remove.

Notes:

When color is applied and allowed to dry before the mask can be removed, the color has a tendency to chip when the mask is lifted from the ware. This can be solved in one of two ways. You can dampen the edge with water or reapply another coat of the underlying color. Be careful to watch where the mask may still be left underneath a color or where the Mask lifts the edge of the top color, but doesn't completely come off of the piece. This may keep the color from adhering to the ware. Do not fire.

AC-304 Media

Characteristics:

Media is a general conditioning and thinning agent used for all water-based products. Mixed or blended with any water-based product, the product's formulation keeps the color from drying out too quickly. It is the preferred media to mix with One Strokes, rather than water. It will recondition a color that has dried out making it workable again. This can be important if the water in your area has chemicals or minerals that may contaminate a product. If your water has a high iron content, for example, it could discolor your red glazes.

Notes:

When mixing colors for brushing ease, Media thins the product while not diluting the strength of the color. Use Media when you want to condition One Strokes or Stroke and Coats, for doing fine detail work. This makes the colors brushable and causes them to flow from the brush, concentrating the color and reducing the necessity of applying several coats to achieve the proper color deposit. Coloramics Media can be used instead of water in the brush for shading work with a Flat Shader The Media is the vehicle that allows the color to blend out of the brush. It can be used in the same manner with One Strokes or Softees Acrylic Stains when doing “Tole” work. It can be added to Softees Acrylic Stains for antiquing. Media maybe added to all Mayco product except the oil based products

AC-305 Mender Adhesive

Characteristics:

Mender Adhesive is used in conjunction with AC-306 Clay Mender for mending greenware. This product will not weaken the greenware as water would if used in mending the ware. Mender Adhesive provides a better bond between the broken parts of the greenware.

AC-306 Clay Mender

Characteristics:

Clay Mender is used with Mender Adhesive to stick wet or dry pieces of greenware together. It is more than just liquid clay. It has chemicals in it that makes it a stronger bond than the existing clay that it mends. It can be used on bisque to join two pieces together, but is primarily for greenware use.

Application:

- If the attachment is a handle or arm like piece, then scoring or marking the area with a Wire Scratch Tool will allow better adhesion of the appendage.
- Apply 2-3 coats of AC-305 to both sides of the break or items to be attached.
- Apply one light coat of AC-306 to both pieces.
- Apply a generous coat of AC-306 and immediately and firmly press the pieces together, holding them into place for 10-20 seconds until they become affixed.
- Let the area dry.
- After drying, the areas can then be sanded and smoothed to prepare for decoration.
- A top dressing of an underglaze may be needed. Clay Mender sometimes will show a slightly different color than the clay being used. There are times when the glaze will not readily adhere to the mended area and the top dressing of an under glaze will overcome this problem.

Notes:

- If there is an area that did not fill in completely with Clay Mender, an additional application may be necessary. If the area is large and cannot be filled in solely with the product, then the addition of some clay dust to the product can thicken it to compensate for the gap in the ware.

- Larger areas or missing areas can be filled in using the Clay Mender thickened with clay dust. Fill in the area slowly and let it dry. Repeat until the area is filled and level with the surrounding areas. A piece of paper towel can be used to support the back of the missing area while you work. The piece of toweling is cut slightly larger than the missing piece, wet with the Clay Mender and applied to the inside area. Allow to dry and then fill in the area.
- Hairline cracks can be difficult to repair. It helps to widen the crack and then fill this area with the Clay Mender, thus bonding the gap.

AC-308 Fired Snow

Refer to page 30 for general directions of application under the Foam glaze category.

AC-520 Solvent Cleaner

Characteristics:

Solvent Cleaner is a mineral spirit based product used to remove excess oil based translucent stains. Dampen a soft cloth with the Solvent Cleaner and wipe away the unwanted color. This product will take off the color quickly and should be used sparingly. It can also be used to remove dried Wax Resist from a brush. You can also use the Solvent Cleaner to clean brushes used to apply Repellent. Do not fire.

AC-523 Non-Fired Snow

Characteristics:

Non-Fired Snow is a water based acrylic material that creates snow effects. Its tough durable properties allow it to be applied to a fired glaze surface to create snow on pieces. It can be applied to bisque directly for an all over background texture. This can be done with a stiff Fan Brush to aid in the even application of the product.

You can tint Non-Fired Snow using any Softees Acrylic Stain or Softees Pearls. However, if a darker color is desired, apply the Snow first, allowed to dry and then apply a top coating of the desired Softees Acrylic Stain, Softees Pearls or Dazzling Metallic.

Clean up is done with warm water and AC-525 Brush Cleaner. This product is quick drying and the brush should be cleaned frequently during use to prevent a build up that is not easily removed. Do not fire.

AC-522 Weathered Krackle

Characteristics:

This unique product is used to create a distressed wood look using acrylic stains. Any type of water base Softees Acrylic Stain, Softees Pearls or Dazzling Metallic can be used as the base coat, but the top coat can only be of an opaque acrylic.

Application:

- Apply a base coat of Softees Acrylic Stain, Softees Pearls or Dazzling Metallic. Allow to dry thoroughly.
- Apply a coat of Weathered Krackle using a fan brush for a smooth even coat. It does not need to be applied heavily. Allow to dry.

- Apply a topcoat of Softees Acrylic Stain to produce the crackle pattern. Flow the color onto the ware using a fully loaded brush sized for the area and piece. Any soft brush or soft fan brush can be used for this application. Do not overlap or reapply the color before the effect takes place.
- Seal the surface with either a spray or brush on sealer. Apply the spray sealer in two light to medium coats.
- The base coat must be dry before application of Weathered Krackle as a wet base coat of color may affect the drying time and final look of the Weathered Krackle.
- Apply Weathered Krackle in a thin even coat using a Fan Brush. Do not apply too heavily as it can produce runs as it dries. Any drips should be removed with a clean moistened brush or a moist finger. Avoid excessive runs and puddles of this product. Wash the brush in AC-525 Brush Cleaner and warm water.
- Do not fire.

Notes:

- The amount of Weathered Krackle applied does not determine the size of the crackle pattern. The crackle pattern is determined by the direction or method of the application of the topcoat of Softees Acrylic Stain, the dryness or dampness of the Weathered Krackle and the viscosity (thickness) of the top acrylic. A drying time of about 30 minutes (depending upon the weather and humidity) is all that is needed to produce the desired effect. The piece should be dry to the touch and able to be handled before applying the Weathered Krackle.
- Many different looks can be achieved by varying any one of these components to the process. Going in one direction with the topcoat will produce striations in the top color. A top coating of Softees Acrylic Stain over wet Weathered Krackle will give a wider crackling pattern as the top coat is drying over a moving base of crackle product. A fine web of transparent crackle can be achieved using a thinned topcoat of opaque acrylic.
- The application of the top coat of Softees Acrylic Stain should be done quickly and smoothly. Do not overwork the area being covered. Overworking or re-stroking an area with the brush full of color will lift the color just applied. The topcoat will start to crackle almost immediately after application. This topcoat of color is applied with any soft brush sized large enough for the piece. A Fan Brush is preferred for this application. Use only Softees Acrylic Stains for the topcoat as Softee Pearls and Dazzling Metallics will not produce the crackle pattern. They may, however, be used under the Weathered Krackle as a base coat.
- Weathered Krackle requires a sealer, either brush on or spray to adequately seal the final surface. Mayco AC-516 Porcelain Mist Spray is the recommended sealer. Remember that several light coats of spray are always best. One heavy coat of spray can create runs or discoloration. Weathered Krackle should not be used for outdoor items and especially items that would be exposed to rain.
- If any decoration is applied over the unsealed surface of the Weathered Krackle, the decoration will continue to crackle where it meets the product. This is fine if this is the look that is being sought. Antiquing over Weathered Krackle is best done by first sealing the surface. A final sealer is applied over the antiquing to complete the piece.
- An authentic weathered wood look can be achieved by rouging the sealed crackle

surfaces with translucent stains. This will give a look of peeling and fading paint as if it were exposed to the elements.

AC-525 Brush Cleaner

Characteristics:

This is a high quality brush cleaner designed for use with all water-based products. It can be used with oil base transluents to clean them as well. Do not use it to clean the fired metallics. The Brush Cleaner is mild to the hands and very effective in ridding brushes of paint particles left in the bristles. If a dried acrylic brush is left to soak in the cleaner, it will dissolve the dried material after a few days. It also conditions the hairs as it cleans.

Application:

To clean a brush with water or oil based products in them the following steps are taken:

1. Pour a tiny bit of AC-525 Brush Cleaner into the palm of your cupped hand.
2. Massage the brush back and forth in your palm. Work the cleaner up into the ferrule of the brush. Do not bend the hairs of the brush as this can cut the bristles at the ferrule.
3. Rinse the brush with lukewarm water and repeat if necessary until the brush rinses clear and clean.

Notes:

Use AC-525 Brush Cleaner to condition a brush when AC-302 Wax Resist or AC-303 Liquid Mask are to be used. Work brush cleaner into the bristles of the brush and blot out the excess. Immediately after the masking agent is used, clean the brush as noted above.

AC-527 Mending and Sculpting Paste

Characteristics:

Mending and Sculpting Paste is a water based, non-toxic texturing medium. It can be used with virtually any water based acrylic color. You can mix it into Softees Acrylic Stains to create your own textured colors. Use as much or as little as you want to create the desired thickness. The medium will not affect the value or intensity of the acrylic color being used. Generally a 1 to 1 ratio is used when mixing with the acrylic color. Less acrylic will give you a rougher texture. The mixture can be applied with a brush, sponge or palette knife to create many interesting surfaces. Clean up is done with AC-525 Brush Cleaner and warm water.

NON-FIRED PRODUCTS

Softees® Acrylic Stains

Basic Information:

Non-fired finishes are applied to bisque and do not need to be fired in a kiln. These fast drying colors are suitable for use on bisque, plaster ware, wood, fabric and a variety of other porous surfaces. They are intermixable and clean up with water. Many specialty products are available for use with the non-fired finishes and these will be discussed in more detail under each product section.

There are two basic categories for non-fired stains. The primary or base coats are water-based acrylic colors. All Softees Acrylic Stains are intermixable to create a virtually unlimited color palette. Specialty sub-categories to the water-based acrylics include products like Dazzling Metallics, Softees Pearls and texturing products. Some are applied as a base or foundation coat, others are added on top of an acrylic or as a final design element to the piece.

The other category of stains is the oil-based (mineral spirit or solvent) type of colors. These Translucent Oil Base Stains are concentrated colors that are generally used to antique a piece, adding dimension to the surface, and are applied over the water-based base coat colors. Specialized products like Non-fired Snow and Weathered Krackle are used to enhance the decorating process.

Acrylic decorated pieces are generally sealed with a final coating of a sealer either brush-on or aerosol spray. These sealers offer the consumer a choice of finishes and are designed to protect the surface. The finishes range from matte to high gloss to the delicate Porcelain-like finish. Each has an appropriate use depending on the project being completed.

Softees® Acrylic Stains

Characteristics:

Mayco's Softees can be used on ceramic bisque, wood, fabric, plaster, paper, and metal. They can also be applied to specially prepared glazed ware that has first been treated with Porcelain Mist Spray Sealer.

Application Instructions:

- Shake plastic squeeze bottles well to thoroughly mix the contents.
- Sand ware using a medium grit pad to insure a smooth surface to receive the color.
- Before application, wipe down the ware using a damp sponge. Do not over wet the piece with water.
- Apply to properly fired shelf cone 04 bisque.
- Use a synthetic brush for basic application, either Base Coat brush or a soft hair brush is ideal.
- Apply two thin coats for best results.
- Allow to dry thoroughly.
- Clean brushes in warm water and AC-525 Brush Cleaner.
- Acrylics are self-sealing, however, a sealer is recommended for easier cleaning.
- All non-toxic.
- Do not fire

Notes:

- For best results apply Softees with a synthetic brush. A non-fired base coat brush or soft hair brush are ideal for this application as either will give a smooth finish that is free of brush marks. Softees can be applied with a sponge or brush. It is better to apply two thin coats rather than one heavy coat to avoid ridges, brush marks and rough textures. A thin coat does not mean that you thin the color to apply it to the ware, it simply means to use less color in the brush. This allows you to brush out the color and obtain a perfectly smooth and solid color before it dries. If a color should become excessively thick with use, thin with AC-304 Media. This will thin the product without diluting the color. If the product is thinned too much, it will not cover the surface of the ware without repeated applications.
- The application of Softees Acrylic Stains is generally the foundation of a stained piece, therefore, it is important to apply the color as evenly and as smoothly as possible. If color is applied improperly, the finish will be marred by excessive brush marks, ridges and textures. Antiquing, blending or rouging with translucent stains will only magnify these imperfections. Air bubbles that develop during the application of the acrylic need to be corrected at this time. These small imperfections can reappear later and cause the base coat to lift or peel. Some corrections can be made by lightly sanding the base coat using fine sandpaper. Wipe off residue with a clean damp sponge and apply a second smooth coat of the color. For a professional look when staining pieces, be sure to complete the backs and bottoms.
- Softees Acrylic Stains do not require a sealer, as they are self-sealing. Whether you seal or not depends on the technique and the materials used on the piece. Sealing does make the ware more soil resistant, therefore, easier to clean. Sealers, either brush-on or spray types are available. When antiquing, a sealer will make the Translucent Stain easier to wipe back and remove.
- Place the colors to be used on a tile that has been covered with a piece of aluminum foil. Softees Acrylic stains should not be washed down the drain and a foil palette allows the unused product to be disposed off easily. Be careful to clean the snap lid before replacing, as dried product can accumulate around the lid. Acrylic stains should not be allowed to dry in a brush, as this will ruin the bristles. Rinse the brush often during use and when finished, wash the brush with AC-525 Brush Cleaner and warm water to insure a clean brush.

Dry Brushing with Softees Acrylic Stains

Dry brushing is a technique where just enough color is left in the brush to tint the piece in gradual layers. This method of application is done with a stiff brush.

Work the brush into the color, and then wipe the excess color onto a lint-free cloth, paper towel, coffee filter or brown paper bag until the bristles feel almost dry. Work the brush back and forth several times. When little color remains in the brush, it is ready to use for dry brushing.

The brush is worked in a soft back and forth motion until an evenly blended coat of color is achieved. In dry brushing, the color is slowly deposited, building up in layers.

Some people describe this motion as “tickling,” “dusting” or “dancing” the color onto the surface. A heavier pressure of the brush will distribute more color onto the ware. A gradual building up of color is the desired effect.

As you paint, the brush may or may not be cleaned in between colors to give a better mixture of colors. If the brush is cleaned between colors, all moisture should be removed by squeezing the brush in a paper towel before again loading the brush with color. It is better to let the brush dry completely, as the added moisture from the brush will affect the drybrushing technique. Allowing a couple of minutes of drying time to pass before the next color is applied works best. Working too fast between color applications can cause the previous color to be lifted off the piece.

The general technique for dry brushing can vary depending upon the base coat color that is applied to the piece. Some techniques call for a dark color, such as black or dark brown, to be applied first to the entire surface of the ware. Then dry brushing of various colors in sequence is done to achieve the final effect. Other techniques call for you to apply a dark hue and then slowly apply lighter shades of that hue. Either technique is acceptable as long as the desired effect is ultimately achieved.

Dazzling Metallics™

Characteristics:

Dazzling Metallics are non-fired water based colors that can be used for solid coverage or detailing. They are applied directly to bisque or over any of the Softees Acrylic Stains.

Application:

For smooth coverage, two lighter coats are better than one heavy coat. Either a synthetic or natural hair brush can be used for application. Dazzling Metallics can be intermixed with any water-based product for interesting effects. The appearance of different metals can be simulated using one of the metallics antiqued with a translucent stain. Porcelain Mist Spray Sealer is not recommended as a final sealer for the metallics, as it will dull the surface. Do not fire.

Notes:

Do not use a brush that has been used to apply a Dazzling Metallic to apply a glaze. Any metallic particles left in the bristles can cause a discoloration in the glaze surface.

Softees® Pearls

Characteristics:

Softees Pearls are high luster acrylics in a wide range of shimmering hues that are water thinnable and intermixable. Pearls can be used on ceramic bisque, fabric and many other craft surfaces.

Application:

Softees Pearls are best applied with a soft hair brush or natural sponge. Pearls may be applied over a base coat of acrylic, but the color performs better if applied directly to bisque.

Softees Pearls are self-sealing because of their glossy translucent base material. These colors take longer to dry and cure, and may remain tacky for several days. Thinning of the pearls for detail work or for a light coating is best done with AC-304 Media which allows the color to be thinned without becoming watery.

A silk sponge can be used to apply these colors to make them appear even. They can be intermixed with any non-fired water based product to give an added dimension to the color. The color should be removed from the brush immediately after use with AC-525 Brush Cleaner and warm water. Color left to dry in a brush will ruin it completely. Do not fire.

Sparkling Sandstones

Characteristics:

Sparkling Sandstones are a non-toxic, water based, textured, acrylic stain. Sparkling Sandstones can be used on ceramic bisque, wood, plaster, Styrofoam, resin, concrete, picture frames, boxes, flower pots, vases, wicker and terra cotta. The addition of these textured colors can give any plain surface a stone-like texture. Sparkling Sandstones will lose their "sparkling" character when covered with an opaque color. The whiter colors of the Sparkling Sandstones work the best for intermixing to create other shades of colors in this line. White Mica is preferred for this application.

Application:

For best results use a stiff Fan Brush for over-all coverage. Two light coats are better than one heavy coat, as the color can streak when over brushed. A second coat will disperse the granules to the areas where they may appear thinner. When using the fan brush to apply the color, apply in a crosshatch application (short crisscross strokes), reloading the brush often to distribute the color evenly.

Notes:

- Sealing of the Sparkling Sandstones is optional. Either matte or gloss spray sealer can be used. However, spray sealing is highly recommended for items that are to be used outdoors.
- When using the Sparkling Sandstones on an item that is to be used in extremely wet conditions or on outdoor items, the inside surface should also be sealed using AC-301 Repellent Sealer.
- Use AC-525 Brush Cleaner and warm water to clean brushes.
- Do not fire.

Non-Fired Snow

Characteristics:

AC-523 Snow is a water-soluble product used to create snow effects and raised

designs. Snow can be applied on top of Softees Acrylic Stains or on top of fired glaze surfaces.

Application:

Snow should be stirred well before use and throughout its usage to keep the product mixed and fluid. A flowing coat is applied using a brush. Use a stiff Brush for over-all coverage.

Once Snow is dry, it is permanent, therefore, rinse brushes and tools during use and again immediately after use with AC-525 Brush Cleaner and warm water. Softees Acrylic Stains or Softees Pearls can be added to Snow to produce a wide variety of colors.

Notes:

- Snow is ideal for adding snow effects on top of fired glazed Christmas trees. Apply the product using a palette knife. Pile on the snow, allowing it to cascade over the top of the branches. Icicles can be pulled down from rooftops or trusses to add dimension to a piece.
- The color is self-sealing and becomes a permanent surface when dry. When applied heavily on top of a fired glaze the product can flow and care should be taken in its application.
- Do not fire.

Translucent Oil Base Stains

Characteristics:

Translucent Oil Based Stains are a rich creamy concentrated translucent formula of colors generally used for antiquing pieces to create depth and dimension. These colors offer the hobbyist an expanded range of decorating possibilities. Their formulation allows easy application and gives the decorator greater control when highlighting and antiquing. Used singularly or in combination, they add multiple effects for the completion of acrylic stain pieces.

Application:

- Apply over a dry Softees Acrylic Stain for the best results.
- May be applied directly to the bisque, but will grab more on open bisque.
- Apply with a stiff brush.
- Apply to a small sections at a time, highlighting and overlapping to complete the piece.
- Wipe off highlights with a soft cloth (T-shirt material).
- All are intermixable. A gold sparkle may be added to any color using TL-115 Gold Blending Media in small quantities. TL-115 may be used alone. The Gold Blending Media should be stirred into the color and not ground into it by means of a palette knife.
- Use AC-552 Solvent Cleaner to remove more color.

- May be applied to glazed surfaces. Gloss or Matte surfaces need to be treated with two coats of AC-516 Porcelain Mist Spray.
- Wash brushes using AC-525 Brush Cleaner and warm water when using the Translucent Oil Base Stains and Rich Transluents™. Use AC-520 Solvent Cleaner to clean brushes when using Twinkles.
- Do not fire.

Application Notes:

Apply a base coat of Softees Acrylic Stain and allow to dry. While they do not necessarily need to be applied over an acrylic stain, the sealing of the bisque does facilitate the ease with which the translucent is removed from the ware. Working in sections, apply the color with a stiff brush allowing it to get into all the recessed and detailed areas of the piece.

When a piece is antiqued with Translucent Oil Base Stains, the color is applied to the piece in small areas, about three to five inches squares and then wiped away; leaving bright highlights on raised areas and deeper tones in the crevices. Any color of Translucent can be used, depending on the desired effect, but for most techniques black or brown is used.

Using a light touch and a soft material (T-shirt) folded into a pad of several layers, wipe down your piece. Working slowly and carefully, apply sufficient pressure to remove antiquing to the desired shade. There is no rush to wipe back quickly when using oilbased transluents. A little more Translucent can be applied, or a little solvent can be used on the wiping cloth to even out or blend the color together.

When using Solvent Cleaner to highlight the areas, it is much better to place a few drops of solvent on a glazed tile, wrap a portion of the cloth over the index finger and pat the cloth into the solvent on the tile. This places the correct amount of solvent on the cloth. The wiping cloth should be turned frequently to expose a clean area to keep from muddying the colors.

When antiquing figurines, attention and care must be focused on the face of the piece. Either do not apply antiquing on the face or wipe down very carefully. Remove any large collection of color in the crevices around the features of the face. The color should appear to be a delicate shadow on the flesh areas.

A properly antiqued piece will show no streaks, smears or smudges. The decorator has the choice of whether the color is light or dark and this decision is personal in choice. For example, an angel would be antiqued very lightly, while an animal figurine may be left darker.

Notes:

- All of the colors can be intermixed to achieve a virtually unlimited color palette. The Twinkles contain a gold fleck for added sparkle. The TL-115 Gold Blending Media can be used to add gold sparkle to any of the other colors in the line. Gold Blending Media is highly concentrated and should be added sparingly to the color. It may also be used alone to give a gold wash effect to a piece.
- Once cured, Translucent Oil Base Stains do not require a topcoat sealer. A spray or brush on sealer may be applied over the translucent stain for durability. When completing techniques requiring multiple layers of Transluents, a coat or a light misting of a spray sealer may be required after two layers of color has been applied. This will set the previous colors for further decorating.

- There are a variety of techniques that use Transluents for tinting and rouging. These methods of decorating are similar in look but applied differently depending on the surface.
- **Tinting** is a thin application of color applied with a soft brush using a light touch.
- **Rouging** is the thin application of color applied with a cloth in a patting or pouncing motion.
- Some people rouge with a brush using a dry brush technique. The decorator may choose the method that is easiest for them.
- The top of some glaze surfaces may be decorated without any advance preparation to the piece. Any AS Series of Astro Gems or AG-610 Foam can be decorated in this manner. Other glazes must first be prepared by spraying with two or more coats of Porcelain Mist spray to dull the surface sufficiently to allow decoration. Let each coat dry for a few extra minutes to determine if more than the two-coat minimum may be needed to dull the surface of the glaze.
- Clean brushes with AC-525 Brush Cleaner and warm water. Solvent can also be used to clean the brush.

Rich™ Translucent Stains

Characteristics

The main characteristic of Rich Translucent Stains is the fact they are non-toxic. Rich Transluents are oil-based, water clean up translucent stains with a vibrant creamy concentrated translucent formula of colors generally used for antiquing pieces to create depth and dimension.

Application:

- Apply over a dry Softees Acrylic Stain for the best results.
- May be applied directly to the bisque, but will grab more on open bisque
- Apply with a stiff brush if antiquing, if applying as top color best to use a soft haired brush.
- Apply to a small section at a time, highlighting and overlapping to complete the piece.
- Wipe off highlights with a soft cloth (T-shirt material).
- All are intermixable.
- Use water to remove color and to clean up brushes and supplies.
- May be applied to glazed surfaces. Gloss and Matte surfaces need to be treated with two coats of AC-516 Porcelain Mist Spray.
- Do not fire.

Application Notes:

Apply a base coat of Softees Acrylic Stain and allow to dry. While they do not necessarily need to be applied over an acrylic stain, the sealing of the bisque does facilitate the ease with which the Rich Translucent is removed from the ware. Working in sections, apply the color with a brush allowing it to get into all the recessed and detailed areas of the piece.

When a piece is antiqued with non fired oilbased Rich Transluents, the color is applied to the piece in small areas, about three to five inches square and then wiped

away; leaving bright highlights on raised areas and deeper tones in the crevices. Any color of Rich Translucent can be used, depending on the desired effect, but for most techniques black or brown is used.

Using a light touch and a soft material folded into the pad of several layers, wipe down your piece. Working slowly and carefully, apply sufficient pressure to remove the rich translucents to the desired shade. There is no rush to wipe back quickly when using oilbased Rich Translucents. A little more Rich Translucent can be applied, or a little water can be used on the wiping cloth to even out or blend the color together.

A properly antiqued piece will show no streaks, smears or smudges. The decorator has the choice of whether the color is light or dark and this decision is personal in choice. When using Rich Translucent color you also have the choice of adding more color after allowing the first application to dry. These colors can be built up to a very rich creamy color. Allow to dry in between applications or spray lightly with AC-502 Matte Sealer.

Notes:

- All the colors can be intermixed to achieve a virtually unlimited color palette.
- Once cured or dried, oilbased rich translucents do not require a topcoat of sealer. A spray or brush on sealer may be applied over the Rich Translucent stain for durability. When completing techniques requiring multiple layers of Rich Translucent color, a coat or light misting of a spray may be required after two layers of color has been applied. This will set the previous colors for further decorating.
- Clean brushes with warm water and AC-525 Brush Cleaner.

Touch ‘n Glo Wax Metallics

Characteristics:

Wax Metallics are a soft, creamy wax metallic paste used for rouging or highlighting ceramic stain pieces. The wide range of colors allows a varied choice of decorating possibilities. Wax Metallics are excellent for “Tole” pieces or for adding highlights or a glimmer of metallic shine to a piece.

Application:

- Apply Wax Metallics to the highlights using the middle finger. They can also be thinned with AC-520 Solvent Cleaner to a brushable consistency.
- Once the color has been applied buffing the color will enhance the shine. Clean up is with AC-520 Solvent Cleaner.
- Do not fire.

Sealers

Brush-On Sealers: AC-501 Gloss and AC-502 Matte

Characteristics:

Brush-on sealers are used over dry acrylic stains to provide a protective coating. Both sealers are water-based and dry clear. They are durable and are water-resistant when dry.

Application:

Do not shake. Stir gently to prevent air bubbles. For best results, apply the sealer with a soft brush. Apply two thin coats. Allow the first coat to dry before applying the second coat. This will insure that there are no brush marks. Clean the brush immediately after use with AC-525 Brush Cleaner and warm water. Do not fire.

Aerosol Spray Sealers: AC-510 Gloss Spray, AC-512 True Gloss Spray, AC-514 Matte Spray and AC-516 Porcelain Mist Spray

Characteristics:

Aerosol spray sealers provide finishes that range from the dullest matte to the highest gloss finish. Spray sealers provide quick drying, smooth, durable, hard coatings for all acrylic Stains. The matte and gloss spray sealers give the colors brightness, enhancing the colors and providing varying degrees of glossiness. Porcelain Mist spray produces the look, touch and feel of elegant porcelain pieces.

Application:

The piece should be dry before applying an aerosol spray sealer. Shake the can well. This should be done for a minimum of two minutes to mix the ingredients well. There is an agitating ball inside to mix the active ingredients.

Hold can approximately 10-12 inches from the surface of the ware. Start and stop the spray away from the piece. Keep the spray can moving as you are spraying. Periodically stop to shake the can to provide the proper mixture of product. This is most important with the Porcelain spray. Make sure each coat is dry before applying the next.

The spray nozzle should be completely depressed when spraying. Not fully depressing the nozzle can cause the spray to falter. Keep your finger out of the spray as larger droplets can form and be transferred to the surface.

To insure that the can functions properly for the next usage, invert the can and depress the nozzle to clear the opening. This should take only a second or two. Depress the nozzle only until no spray escapes. You will hear air escaping, but will not see any spray being emitted.

Notes:

- Spray applied to wet acrylic can cause the color to bleed if applied too heavily.
- For the final coating of sealer, allow the piece to dry a day or two as moisture can be trapped into the spray sealer.
- The final sealing “coat” is two to three light coats of the desired spray.
- A “set” coat can be applied with a sealer while work is in progress. Apply one very light coat; just enough to set the color for further decoration. Either Porcelain Mist or Matte Spray is preferred.
- When spraying, the distance from the ware should be 10 to 12 inches. Refer to the label for any noted difference in this distance. Spraying from a greater distance can cause the tiny droplets of sealer to dry before they come into contact with the piece. Holding the can too close can cause runs, drips and discoloration in the final coating.
- For best results, spray at room temperature (70°-75°) and do not spray in high humidity areas. The humidity in the air can be trapped in the layers of the sprayed surfaces producing a cloudy look and should be taken into consideration when using.
- Use sprays only in a well-ventilated area. A spray booth should be designed with enough air draft to pull the overspray away from the user and large enough to keep it off other objects.
- While there is no immediate danger from using spray sealers, as a precautionary measure a respirator should be used. This will also insure no escaping sealer fumes are breathed. If a spray booth is not used, a window should be opened to remove any fumes.
- Do not spray in drafty areas. Spraying outside is acceptable, taking into consideration the humidity and any wind while in use. Excessive wind can cause the spray to blow back into your face instead of onto your piece. The air temperature should be noted as temperatures of more than 85° or less than 70° will give poor results.

Porcelain Mist spray gives the look and feel of fine porcelain. This product will deaden the glossiest of surfaces. It can be used over a fired glaze surface to imitate the appearance of porcelain bisque. This will allow you to decorate with stains on top of the fired glaze surface.

The application of Porcelain Mist spray should be done in several light coats with sufficient drying time in between. Insufficient drying time or insufficient shaking of the can may cause the colors underneath to appear cloudy or milky. This can also result from excessive moisture in the air or from the piece.

Porcelain Mist spray should never be applied over Glitters or Metallics as they will dull the reflective surface of the color.

When Porcelain Mist spray is applied over fired gold it gives the appearance of Roman Gold and over Mother-of-Pearl it gives a subtle opalescence. If a piece has fired Gold Luster and you wish it to remain shiny after the stain decoration, apply AC-304 Liquid Mask to the desired areas to protect it from the spray. Apply two coats of Mask to give proper protection and ease of removal of the mask afterwards. Read the label for directions on using the masking agent as it pertains to the brush.

Porcelain Mist spray is used on animals to give them that natural look after drybrushing.

Matte Spray is somewhat glossy but not exceedingly so. This is the most preferred Spray for all around use. Two light coats will give a pleasing shine to the finished piece. Three light coats make it a bit shinier. Too much can give a slightly yellow cast. Matte Spray is a good choice to use to set colors while working.

Gloss Spray is a shiny glossy surface. It gives the ware a nice polished shine. It works well with most techniques to provide a tough durable glossy surface. This spray will brighten and enliven your colors.

True Gloss Spray provides the ultimate in shine. This spray is even shinier than the Gloss Spray in appearance. For those pieces that need to resemble a fired glaze surface this is the perfect choice. The acrylic colors will appear bright and wet.

AC-520 Solvent Cleaner

Characteristics:

This is an odorless solvent used for removing excess translucent from your brush or for lightening an antiqued piece.

Application:

Use T-shirt material to apply the solvent to the desired highlighted areas. Wrap the T-shirt material around the index finger and dab with solvent to assure the proper amount is used during this process.

Notes:

Use to remove dried MP-2 Wax Resist and Repellent from brushes.

Magic Metallic™

Characteristics:

Magic Metallics are not a faux finish but a real metal coating. These coatings contain real ground metal particles that adhere to the surface and cause the finished piece to look as though it's actually made of metal. Magic Metallics may be applied to almost any paintable surface. They work like magic to create patina and real rust finishes. The Metallic Finishes are beautiful used alone but may be further enhanced by the addition of one of the Patinas or the Quick Rust Finish.

The metallic finishes can be mixed to create an endless variety of metallic colors; Magic Metallics can also be mixed with acrylic paint. The base color or combination of colors used, the application of rust and patinas, the length of time the product is allowed to process before it is neutralized or dried, the amount of product used, even the temperature and humidity will all affect the finished results.

A unique and original finish can be obtained every time. Follow our instructions or have fun experimenting on your own with unique combinations of metallic finishes and patinas.

Application:

- Apply a basecoat of the metallic finish. Allow to dry. Apply a second coat and while slightly tacky apply the Patina solution.
- Apply your choice of Patina antiquing solution to basecoated piece with a brush, sponge or spritzer bottle. As the solution dries, the Patina will develop.
- Once the desired effect is achieved, apply neutralizer to stop the process. You may also dry the piece with a hair dryer. Seal with Matte Sealer.
- Once the base metal is applied, a reactionary agent is sprayed, sponged or brushed over the metal. These reactive patinas or rusts speed up the natural oxidation process of the metal. While it may take rust several years to develop in nature, this oxidation will occur in minutes right before your eyes. Other factors such as humidity, temperature and the dampness of the product may speed up the process even more.

There are several hues of Patinas and tints that may be used alone or in combination with one another to create different shades on a piece. Once the desired reaction is achieved a neutralizing agent is applied to the surface or the area is dried with a hair dryer to stop the oxidation process.

Use the Magic Metallic Sealer to seal the final surface. The insides of pieces must be sealed as well or the oxidation process will continue due to the porous surface and absorption of moisture through the bisque.

Notes:

- Always refer to the label for specific instructions on the product being used.
- Metallics should be shaken and stirred to make sure the metals are in suspension for application. Due to the heaviness of these metals, they do not stay suspended in the jar and will sink to the bottom.
- The surface should be completely clean, dry and free from dust. The inside of hollow objects should be sealed prior to the application of the metals. This prevents the continued oxidation process from continuing even after the outer color has been neutralized. Ceramic bisque is porous and will allow even water vapor in the air to eventually affect the metal's color.
- Apply metal colors with a soft brush. They can also be applied with a sponge or rag. A separate brush should be kept for the applications of the metals, as the fine particles if left embedded in the hairs of the brush will discolor glazes.
- Two coats of the Metallics are needed for adequate coverage. The first coat should be dry before the second coat is applied. While the second coat of metal is still damp or tacky the Patinas are applied. (The Dark Bronze, however, can be completely dry and still react to the Patinas.) Steel requires heavy coats for good rusting to take place, so an extra "padding" of color is suggested.
- Steel does not react with the Aqua Blue Patina. Steel will react with the Quick Rust or Verde Green or Green Patina. Applying one coat of Steel over another metallic and applying the Patina can create an interesting effect. This creates a two-tone effect of colors.
- The Purple Patina is a tinting color used to add variety. It will not oxidize by itself. Combinations of patinas as well as a tinting patina may be used on the piece at the same time. The patinas may be intermixed. A favorite is the Verde Green with Aqua Blue Patinas.

- The Patinas may be applied with a brush, sponge or by spraying using the spritzer nozzle. The spritzer nozzle fits easily onto the Patina bottles. A little goes a long way! More can always be added later. Remember you are letting the color oxidize or bloom. The Patinas and Rust oxidizing mediums are almost clear in appearance. Several colors of Patinas can be applied to the same piece at the same time. Brush strokes of the Patinas in a design can be completed if so desired, oxidizing the pattern only.
- Once the Patina or Quick Rust has oxidized on the metal, a neutralizing agent is applied to stop the process. Sometimes it's better to stop the process before it goes to the extreme oxidation or rusting of the metals. Part of the beauty is being able to still see the metal color underneath the Patina.
- Several areas may be completed independently of each other to create separate areas on the same piece. Different areas can be added over other sealed areas of metals to create multiple layers of oxidation and colors.
- The metal base coats may be forced dried. The Patinas and Quick Rust should be allowed to dry naturally and let the "Magic" of the product take place.
- If too much Patina has developed, it can be removed slightly using a clean soft cloth or a dampened green grit pad to remove some of the Patina. After the Patina has been applied, you may choose to take a dry cloth and remove some of the Patina on the highlights on the piece. This will in effect, produce an antiquing of the Patinas. Drybrushing of a metal over the sealed Magic Metallic™ finish can give life to a piece.
- These products speed up the natural oxidation of metals. Overspraying and depositing the Patinas or Quick Rust on metal shelving or tables will cause them to oxidize. Use care when spraying. Any health cautions are noted on the jar label.
- Once the piece is completed or has been allowed to oxidize to your preference, the color is neutralized using the MM-400 Patina/ Rust Neutralizing Agent, then a sealer is applied. The Neutralizing agent can be applied to stop the oxidation process. A coating of a specialized sealer needs to be applied over the neutralized colors. This sealer is specifically designed for this product. Do not attempt to use other brush on sealers over the Magic Metallics.
- All products are water-soluble and water clean up. Use AC-525 Brush Cleaner and water to clean all brushes.
- The inside of hollow pieces must be sealed or they will continue to oxidize even after the other steps have been completed. The sealer may be rolled to the interior of the piece if brushing would be difficult.
- There is one sealer for Magic Metallics™ Matte Interior, and is intended for indoor use.
- Use a soft hair brush for the application of the sealer. Apply 3-4 thin coats of Sealer.
- Use AC-525 Brush Cleaner and warm water to clean brushes.

High Fire Guide

High Fire Cone 6 Data

The following is an outline of what you can expect to encounter when firing any of Mayco's glazes to shelf cone 6. All colors were painted as directed on the jar label onto a high-fire greenware body. Any changes that took place in the color or surface quality are described as accurately as possible. However, since these are only our descriptions it is recommended that you use these descriptions as a starting point and always test fire the glaze on your own high-fire body. crazing is possible depending on the body you use. Food safe, lead-bearing glazes may NOT still be food safe at a high fire. Glazes rated non-toxic and food safe will remain so providing they do not craze. Although some Mayco glazes will fire up to shelf cone 10, we have not tested this temperature or included results at temperatures higher than shelf cone 6.

Due to their composition, the following do not withstand cone 5 firing.

UR-90 Bright Red	BG-642 Vibrant Red
BG-259 Cranberry Red	BG-261 California Orange
BG-600 Dragon Red	BG-643 Tangerine
BG-640 Poppy Orange	BG-644 Poppy Red
G-3001 Real Red	G-3002 Real Orange
G-3003 Chrome Yellow	

Codes

NC = No noticeable change in color or characteristics

CH = There is noticeable change in color or characteristics

XC = Crystal has changed color

Stroke and Coat® WonderGlaze® for Bisque

Applied 3 coats of all glazes.

Item#	Name	Code	Details
SC-1	Pink-A-Boo	CH	Color becomes beige to off white
SC-2	Melon-Choly	NC	
SC-3	Wine About It	NC	
SC-4	Salsa	NC	
SC-5	Tiger Tail	CH	Color fades & is very unstable
SC-6	Sunkissed	NC	
SC-7	Leapin' Lizard	NC	
SC-8	Just Froggy	NC	
SC-9	Jaded	NC	
SC-10	Teal Next Time	NC	
SC-11	Blue Yonder	NC	
SC-12	Moody Blue	NC	
SC-13	Grapel	NC	
SC-14	Java Bean	NC	
SC-15	Tuxedo	NC	
SC-16	Cotton Tail	NC	
SC-17	Cheeky Pinky	NC	
SC-18	Rosey Posey	NC	
SC-19	Plum Crazy	NC	
SC-20	Birthday Suit	NC	
SC-21	Sunburn	NC	

Stroke & Coat Continued

Item#	Name	Code	Details
SC-22	Carrot Top	NC	
SC-23	Jack O'Lantern	NC	
SC-24	Dandelion	NC	
SC-25	Crackerjack	NC	
SC-26	Green Thumb	NC	
SC-27	Sour Apple	NC	
SC-28	Blue Isle	NC	
SC-29	Blue Grass	NC	
SC-30	Blue Dawn	NC	
SC-31	The Blues	NC	
SC-32	Bluebeard	NC	
SC-33	Fruit of the Vine	NC	
SC-34	Down to Earth	NC	
SC-35	Gray Hare	NC	
SC-36	Irish Luck	NC	
SC-37	Ivory Tower	NC	
SC-38	For-Evergreen	NC	
SC-39	Army Surplus	CH	Lightens
SC-40	Blueberry Hill	NC	
SC-41	Brown Cow	NC	
SC-42	Butter Me Up	NC	
SC-43	Lettuce Alone	NC	
SC-44	Fountain of Youth	CH	Color fades
SC-45	My Blue Heaven	NC	
SC-46	Rawhide	NC	
SC-47	Taupe n'Glory	CH	Becomes off white
SC-48	Camel Back	CH	Becomes light pinky brown
SC-50	Orange Ya Happy	NC	
SC-51	Poo Bear	CH	Becomes light yellow green
SC-52	Toad-aly Green	CH	Lightens to olive green
SC-53	Purple Haze	CH	Faded to powder blue
SC-54	Vanilla Dip	NC	
SC-55	Yella Bout It	CH	Color fades
SC-56	Spruced Up	CH	Color fades to teal
SC-57	Cockateal	CH	Grayed teal
SC-58	501 Blues	CH	Fades to purple
SC-60	Silver Lining	NC	
SC-61	Razzberry Mauve	CH	Lightens to purple mauve
SC-62	Spunky Punkin	CH	Lightens to caramel tan
SC-63	Popeye's Favorite	CH	Lightens to orange cast
SC-64	Celery Stalk	CH	Fades
SC-65	Peri-Twinkle	CH	Lightens
SC-66	Ultra Violet	CH	Fades to light blue
SC-67	Cherry Bomb	NC	
SC-68	Reddy or Not	NC	
SC-69	Princess Pink	CH	Color fades
SC-70	Pink-a-Dot	CH	Color fades

Dimensional Stroke and Coat®

Dimensional Stroke & Coat retain their color, but flatten out during firing. Can be used at high temperatures, but requires test firing.

Speckled Stroke and Coat® WonderGlaze® for Bisque

Applied 3 coats of all glazes.

Item#	Name	Code	Details
SP-201	Speckled Pink-A-Boo	CH	Fades to beige with specks
SP-202	Speckled Melon Choly	NC	
SP-203	Speckled Wine About It	NC	
SP-204	Speckled Salsa	NC	
SP-205	Speckled Tiger Tail	CH	Color Fades
SP-206	Speckled Sunkissed	NC	
SP-210	Speckled Teal Next Time	NC	
SP-211	Speckled Blue Yonder	CH	Color Fades
SP-212	Speckled Moody Blue	NC	
SP-213	Speckled Grapel	CH	Color Fades Slightly
SP-216	Speckled Cotton Tail	NC	
SP-223	Speckled Jack O'Lantern	NC	
SP-226	Speckled Green Thumb	NC	
SP-227	Speckled Sour Apple	NC	
SP-231	Speckled The Blues	CH	Color lightens
SP-241	Speckled Brown Cow	NC	
SP-245	Speckled Blue Heaven	NC	
SP-253	Speckled Purple Haze	CH	Fades to powder blue
SP-254	Speckled Vanilla Dip	NC	
SP-260	Speckled Silver Lining	CH	Develops green
SP-270	Speckled Pink-A-Dot	CH	Color Fades

Crystalite™ Non-Toxic Crystal Glazes

At shelf cone 6, many of these glazes become more fluid. We recommend you avoid placing crystals any closer than 1/2" up from the outside bottom edge. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
S-2701	Peacock Eyes	CH	Background slightly grays
S-2702	Northern Lights	CH	Background fades to nothing and crystals fade
S-2703	Berryberry Pie	CH	Lavender blue with green crystals
S-2704	Plum Jelly	CH	Medium purple with blue & white spots
S-2705	Desert Mist	CH	Crystal becomes mossier
S-2706	Spiced Banana	CH	Colors wash out
S-2707	Lily Jade	CH	Crystals become rusty tan
S-2708	Oriental Carmel	CH	Background lightens with cream, dark brown crystals
S-2709	Cappuccino Mint	CH	Golden yellow background with cream & dark brown crystals
S-2710	Evergreen Flurry	NC	
S-2711	Tahiti Grape	CH	Light jade with yellow and blue crystals
S-2712	Monsoon Seas	CH	Crystals change to blue and green agate
S-2713	Buttercup Blue	CH	Background washes out
S-2714	Herb Garden	CH	Changes to mossy green
S-2715	Spotted Kiwi	CH	Color darkens
S-2716	Celestial Blue	NC	
S-2717	Rocky Road	CH	Color becomes more yellow
S-2718	Cosmic Black	CH	Fades to green cast
S-2719	Cranberry Burst	CH	Color Fades
S-2720	Orange Fizz	NC	
S-2721	Stars & Specks	CH	Color fades slightly, specks spread
S-2722	Blue Chip	CH	Background has no change, specks spread
S-2723	Grape Divine	CH	Background slightly lighter, specks spread

Elements™ Non-Toxic Glazes

At shelf cone 6, many of these glazes become more fluid. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
EL-101	Oyster Shell	CH	Turns light variegated green-blue
EL-102	Sandstorm	CH	Becomes light beige
EL-103	Sea Spray	CH	Becomes clear light blue
EL-104	Heather Moor	CH	Becomes muddy green
EL-105	River Birch	CH	Variegated gold green
EL-106	Tidal Pool	CH	Variegated tan
EL-107	Amber Ash	CH	Black specks on gold background
EL-108	Jade Moss	CH	Turns reddish gold
EL-109	Blue Ridge	CH	Turns streaked red brown
EL-110	Mudslide	CH	Turns brown-gold
EL-111	Ruby Creek	CH	Gold float over dark brown
EL-112	Tornado Sky	CH	Dark brown with light gold float
EL-113	Spanish Moss	CH	Becomes glossy; turns to dirty mustard
EL-114	Copper River	CH	Green-black with mustard float
EL-115	Iron Moss	CH	Turns to dark mustard
EL-116	Blue Stone	CH	Turns khaki
EL-117	Waterfall	CH	Turns to caramel
EL-118	Blue Grotto	CH	Becomes muddy brown

Elements™ Chunkies Non-Toxic Glazes

At shelf cone 6, many of these glazes become more fluid. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
EL-201	River Bottom	CH	Small specks lighten; bkgd is green/caramel
EL-202	Bark	CH	Specks lighten; caramel background
EL-203	Coal Dust	CH	Specks fade; bkgd is medium green/brown
EL-204	Glowing Embers	CH	Specks whiten; light green to caramel bkgd
EL-205	Jade Pebbles	CH	Specks lighten; caramel background
EL-206	Meteor Shower	CH	Specks fade; bkgd is medium green/brown

Pottery Coat™ Non-Toxic Glazes

Item#	Name	Code	Details
PC-501	Terra Cotta Base	CH	Glossy; Darkens
PC-502	Speckled Buff Base	CH	Glossy; Specks become larger
PC-503	Khaki Base	CH	Glossy; light terra cotta
PC-504	Concrete Base	CH	Glossy; Specks become larger
PC-505	Black Base	CH	Glossy; Darkens & surface becomes textured

Pottery Cascade™ Non-Toxic Glazes

Item#	Name	Code	Details
PC-601	Clear Cascade	NC	Become more fluid
PC-602	White Cascade	NC	Become more fluid

Classic Crackles™ Non-Toxic Glazes

At shelf cone 6, many of these glazes become more fluid. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
CC-101	Transparent Crackle	CH	Glaze is not stable
CC-102	White Crackle	CH	No color change, no crackle
CC-103	Raw Silk	CH	Color fades; fine cracks
CC-104	Plum Blossom	CH	Color fades; fine cracks
CC-105	Orange Pekoe	CH	Color fades; fine cracks
CC-106	Fuji Brown	CH	Color fades; fine cracks
CC-107	Green Tea	CH	Color fades; fine cracks
CC-108	China Sea	CH	Color fades; fine cracks

Stoneware-Like™ Glazes

Item#	Name	Code	Details
SLG-02	Country Stone	CH	Lightens to powder blue with specks
SLG-06	Country Cream	NC	
SLG-17	Country Light Grey	NC	

Series 2000™ Non-Toxic Gloss Glazes

Most of this group crazed on the stoneware body we tested, making it inappropriate for dinnerware applications when fired to shelf cone 6. At shelf cone 6, many of S-2100 glazes become more fluid. If you are a heavy glazer, 2 coats may be sufficient. Test firing is advisable.

Item#	Name	Code	Details
S-2101	Natural Clear	NC	
S-2102	Snow White	NC	
S-2103	Raspberry Whip	CH	Color is lavender
S-2104	Salmon Mousse	NC	
S-2105	Orange Slice	NC	
S-2107	Dry Champagne	CH	Color changes to yellow-tan
S-2109	Sassy Yellow	NC	
S-2110	Glade Green	NC	
S-2111	Ivy Green	NC	
S-2112	Pastel Jade	CH	Color shifts toward green
S-2113	Nautical Jade	NC	
S-2114	Night Sea	CH	Lightens
S-2115	Tahiti Blue	CH	Color is more transparent
S-2116	Mosaic Blue	NC	
S-2117	Wisteria Purple	NC	
S-2118	Cocoa Bean	CH	Color shifts toward yellow
S-2119	Rich Chocolate	NC	
S-2120	Double Fudge	CH	Color is more yellow
S-2121	Shiny Black	CH	Color is rich brown
S-2122	Victorian Red	NC	
S-2123	Royal Teal	NC	
S-2126	Ivory Linen	NC	
S-2127	Smoked Oyster	CH	Color more of a greenish gray
S-2128	Mocha Ice	NC	
S-2130	Crystal Coral	CH	Color is lighter

Series 2000™ Non-Toxic Gloss Glazes Continued

Item#	Name	Code	Details	S-2131	Aqua Mist	NC
S-2132	Sheer Blue	NC				
S-2133	Clear Blu-Speck	CH	Specks faded			
S-2134	Licorice Speck	CH	Specks bled to green-black			
S-2136	Chocolate Speck	CH	Specks faded			
S-2137	Clear Wine Speck	NC	Did not craze			
S-2138	Pink Champagne	CH	Lightens to off white			
S-2139	Floral Pink	CH	Lightens to off white with grey			
S-2140	Pretty 'n Pink	CH	Fades to pastel pink			
S-2141	Just Peachy	CH	Lightens			
S-2142	Orange Squash	CH	Lightens to golden yellow			
S-2143	Rustic Orange	CH	Fades			
S-2144	Clarret	CH	Lightens to rosey pink			
S-2145	Mystic Mauve	CH	Lightens			
S-2146	Bordeaux	CH	Lightens to light violet			
S-2147	Orchid	CH	Lightens to pink			
S-2148	Lilac	CH	Lightens to light blue purple			
S-2149	Blue White Ice	CH	White with blue tint			
S-2150	Marine Blue	CH	Lightens to aqua			
S-2151	Blue Lagoon	CH	Darkens slightly			
S-2152	Corn Flower Blue	CH	Lightens to french blue			
S-2153	Old Navy	NC				
S-2154	Winter Mint	CH	Lightens			
S-2155	Szechuan Green	CH	Changes to mossy green			
S-2156	Evergreen Fir	CH	Fades			
S-2157	Holiday Green	CH	Changes to olive green			
S-2158	Green Sapphire	CH	Fades to light mist green			
S-2159	Pale Yellow	NC				
S-2160	Summer Sun	NC				
S-2161	Golden Oak	CH	Fades to light yellow brown			
S-2162	Saddle Tan	CH	Fades to light yellow			
S-2163	Mudpuddle Brown	CH	Fades to light yellow tan			
S-2164	Silver Cloud	NC				
S-2165	Sooty Grey	CH	Fades with green cast			
S-2166	Old Smoke	CH	Fades with blue cast			
S-2168	Red Hot Red	NC				
S-2560	Queens Blue	CH	Color fades slightly			
S-2561	Country Blue	NC				
S-2562	Canton Jade	NC				
S-2564	Sun Yellow	NC				
S-2565	Cloud White	NC				
S-2566	Almond	NC				
S-2574	Tea Rose	CH	Color changes to dull tan			
S-2577	Wild Rose	CH	Color more transparent, eggshell surface			
S-2578	Elf Green	CH	Color intensifies			
S-2579	Mediterranean Teal	CH	Color intensifies			
S-2580	French Blue	CH	Color shifts slightly to a blue-green shade			
S-2581	Periwinkle	NC				
S-2582	Caramel Apple	CH	Color becomes more transparent			
S-2585	Violet Reflections	CH	Lightens to blue			
S-2586	Bing Cherry	CH	Lightens to mauve pink			

Series 2000™ Non-Toxic Gloss Glazes Continued

Item#	Name	Code	Details
S-2587	Big Sky Blue	CH	Slightly grays
S-2588	True Blue	CH	Slightly grays
S-2589	Bear Brown	CH	Lightens
S-2590	Intense Yellow	CH	Fades to light lemon yellow
S-2591	New Leaf	CH	Lightens
S-2592	Deep Teal	NC	
S-2593	Jungle Green	NC	

Series 2000™ Non-Toxic Matte Glazes

All glazes in this group become glossy and translucent at shelf cone 6.

Item#	Name	Code	Details
S-2200	Marshmallow White	CH	Color is grayer
S-2201	Ivory Cream	CH	Color is grayer
S-2208	Deep Sea Blue	CH	Color is darker
S-2209	Black Velvet	CH	Color is a good gloss black
S-2218	Milk Chocolate	CH	Color turns light brown
S-2220	Autumn Orange	CH	Becomes glossy
S-2221	Pumpkin Tart	CH	Becomes glossy
S-2223	Soft Yellow	CH	Becomes pale yellow to cream
S-2224	Coral	CH	Becomes more translucent
S-2225	Red	NC	
S-2226	Rose Berry	CH	Color fades away
S-2227	Parchment Pink	CH	Very light tan
S-2228	Orchid	CH	Light Pink
S-2229	Violet	CH	Becomes blue-purple
S-2230	Deep Purple	CH	Powder blue
S-2231	English Blue	CH	Color lightens
S-2232	Indigo Blue	NC	
S-2233	Light Olive	CH	Color lightens slightly
S-2234	Clover Green	NC	
S-2235	Dark Sage	CH	Lighten to mint green
S-2236	Tan	CH	Very light tan
S-2237	Taupe	CH	Changes to medium tan
S-2238	Dark Gray	CH	Changes to light brown
S-2239	Slate	CH	Lightens to greenish grey

Series 2000™ Non-Toxic Speckstone Glazes

Item#	Name	Code	Details
S-2401	Cotton Seed	CH	Glaze is glossy, color fades, no speck
S-2402	Peppercorn	CH	Glaze is glossy, color fades, no speck
S-2408	Cream Spice	CH	Color and speck fade
S-2421	Berry Parfait	CH	Changes to lavender
S-2422	Evergreen Ash	CH	Color becomes brighter, more intense
S-2423	Teal Splash	CH	Color becomes brighter, more intense
S-2424	Blue Enamelware	CH	Color shifts to blue-green
S-2425	Pepperwinkle	CH	Color darkens, specks more predominant
S-2427	Fiesta	NC	
S-2167	Holiberry	NC	
S-2169	Eggnog	NC	

One Stroke™ Translucent Underglazes

All One Stroke colors were top coated with C-101 Crystal Clear Glaze.

Item#	Name	Code	Details
OS-1	Mirror Black	CH	Color has a green cast
OS-2	Snow White	NC	
OS-3	Lip Red	CH	Fades to a muted pink
OS-4	Chinese Blue	NC	
OS-6	Foliage Green	NC	
OS-8	Briarwood	NC	
OS-9	Auburn	NC	
OS-17	Pearl Gray	NC	
OS-18	Princess Blue	NC	
OS-21	Petal Pink	NC	
OS-26	Buttercup	NC	
OS-29	Delft Blue	NC	
OS-32	Shamrock Green	CH	Color becomes slightly darker
OS-34	Sienna Brown	NC	
OS-36	Umber	NC	
OS-38	Yuma Turquoise	NC	
OS-41	Real Holly	NC	
OS-43	Catalina Blue	CH	Color becomes darker
OS-44	Dark Red	CH	Becomes more intense
OS-45	Ultra Orange	CH	Becomes more intense
OS-46	Bright Red	CH	Becomes more intense
OS-47	Purple	NC	
OS-48	Leaf Green	NC	
OS-52	Passion Plum	CH	Color changes to a light blue
OS-53	Melon Blush	NC	
OS-54	Southern Peach	CH	Color changes to a tan with hint of pink
OS-58	Loganberry	CH	Color unstable; performs better under S-2101 Natural Clear
OS-59	Sunflower	NC	
OS-60	Pansy Petal	CH	Color changes to blue gray
OS-61	Azure Blue	NC	
OS-62	Lime Green	NC	
OS-63	Basil Green	NC	
OS-65	Red Earth	NC	
OS-66	Taupe	CH	Lightens
OS-104	Sun Yellow	NC	
OS-105	Golden Ochre	CH	Lightens
OS-132	Chestnut Brown	NC	
OS-136	Lavender	CH	Lightens to pinkish tone
OS-137	Thistle Purple	CH	Light blue
OS-138	Rose	CH	Lightens to tan
OS-140	Jade Green	NC	
OS-142	Hunter Green	NC	
OS-143	Fleshtone	CH	Lightens
OS-144	Golden Buckskin	NC	
OS-147	Powder Blue	NC	
OS-153	Denim Blue	CH	Lightens

Opaque Underglazes

All Underglazes were painted on greenware, then covered with two coats of C-101 Crystal Clear Glaze.

Item#	Name	Code	Details
UG-1	Kings Blue	CH	Color becomes darker
UG-2	Sea Blue	CH	Color becomes weaker
UG-3	Baby Blue	NC	
UG-7	Purple	CH	Color becomes a dull blue-gray
UG-8	Violet	CH	Color fades to a light blue-gray
UG-10	Crimson	CH	Color fades
UG-11	Ruby Red	CH	Color fades
UG-12	Deep Rose	CH	Color fades
UG-15	Coral Pink	NC	
UG-17	Sandalwood	NC	
UG-18	Ice Blue	NC	
UG-19	Electra Blue	NC	
UG-21	Leaf Green	CH	Becomes a dull olive green
UG-22	Spring Green	CH	Fades & turns green-brown
UG-24	Jade Green	CH	Color fades
UG-25	Lime	NC	
UG-26	Myrtle Green	CH	Becomes deeper blue-green
UG-27	Pomona Green	NC	
UG-30	Sand	CH	Changes to dark tan
UG-31	Chocolate	NC	
UG-32	Cocoa	CH	Color fades
UG-33	Redwood	CH	Changes to dark yellow-brown
UG-34	Chestnut Brown	NC	
UG-35	Carnation Pink	CH	Color disappears
UG-37	Suntan	CH	Color darkens slightly
UG-38	Pink Flesh	CH	Color disappears
UG-39	Light Flesh	CH	Becomes dull yellow
UG-41	Orange	NC	
UG-42	Light Yellow	NC	
UG-43	Lemon Yellow	CH	Becomes slightly orange
UG-45	Golden Yellow	CH	Color fades
UG-46	Bright Yellow	NC	
UG-50	Jet Black	CH	Color becomes dark brown
UG-51	China White	NC	
UG-52	Pepper Grey	CH	Color fades
UG-53	Silver Grey	CH	Color becomes blue-gray with blue specks
UG-56	Rustic Red	CH	Color fades to a light tan
UG-57	Spice Brown	NC	
UG-58	Harvest Gold	NC	
UG-67	Ivory	NC	
UG-68	Apple Green	NC	
UG-69	Green Olive	CH	Sandy beige
UG-70	Medium Green	CH	Color shifts toward yellow
UG-71	Wisteria	NC	
UG-72	Wedgewood Blue	NC	
UG-73	Cobalt Black	NC	
UG-75	Peach	CH	Becomes a faint yellow

Item#	Name	Code	Details
UG-78	Desert Coral	CH	Soft tan
UG-80	Slate Blue	CH	Color becomes a deeper blue
UG-81	Cottage Brown	CH	Color fades to a dark tan
UG-82	Tucson Turquoise	NC	
UG-83	Blue Jade	NC	
UG-84	Deep Red	CH	Color becomes more vibrant
UG-85	Orange Sorbet	CH	Color becomes more vibrant
UG-86	Coral Red	CH	Color becomes more vibrant
UG-87	Regal Purple	CH	Color fades slightly
UG-89	Lemon Drop	CH	Color fades slightly
UG-90	Green Mist	CH	Color fades slightly
UG-91	True Teal	NC	
UG-92	Lilac	CH	Color becomes very light pink
UG-93	Wild Violet	CH	Color becomes pale blue
UG-94	Pansy Purple	CH	Color becomes a gray blue
UG-95	Royal Navy	NC	
UG-97	Bright Blue	NC	
UG-98	Desert Toast	CH	Lightens
UG-100	Terra Cotta	CH	Chocolate Brown
UG-103	Rose	CH	Lightens to tan
UG-104	Red Garnet	CH	Loose all color
UG-105	Orchid	CH	Powder blue
UG-108	Alice Blue	CH	Powder blue
UG-109	Powder Blue	CH	Very light blue
UG-110	Capri Blue	CH	Become teal blue
UG-111	Marine Blue	NC	
UG-116	Aqua	NC	
UG-119	Green Grape	NC	
UG-125	Natural Flesh	CH	Lightens
UG-127	Nutmeg	CH	Carmel brown
UG-128	Teakwood	CH	Redish brown
UG-130	Hair Brown	CH	Carmel brown
UG-131	White	NC	
UG-136	Pacific Blue	NC	
UG-141	Candy Pink	CH	Light tan
UG-142	Grass Green	NC	
UG-144	Blue Sky	NC	
UG-145	Evergreen	CH	Olive green
UG-146	Pink Pink	CH	Becomes tan
UG-150	Royal Purple	CH	Becomes grey blue
UG-178	Folk Art Blue	NC	
UG-180	Satin Blue	NC	
UG-181	Cape Cod Grey	NC	
UG-189	Lavender	CH	Powder blue
UG-191	Real Brown	CH	Carmel brown
UG-192	Pearl Grey	CH	Lightens
UG-194	Purple Iris	CH	Becomes light grey
UG-195	Ivory Toast	NC	
UG-196	Tropical Blue	NC	
UG-198	Dark Grey	NC	
UG-201	Beach Sand	NC	
UG-202	Walnut Speck	CH	Becomes carmel brown

Jungle Gem™ Crystal Glaze

Firing to shelf cone 6 gives the user lively finish, with a considerable difference in appearance at shelf cone 6 compared to shelf cone 06-05. The following descriptions will define the change, but your results may vary. At shelf cone 6, many of these glazes become more fluid. We recommend you avoid placing crystals any closer than 1/2" up from the outside bottom edge. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
CG-701	Exotic Purple	CH	White crystals with green and lavender
CG-703	Tropical Feathers	CH	Avocado with gold float, white crystals
CG-704	Rain Forest	CH	No change, more flow of brown crystals
CG-706	Marbleous Blue	CH	Lavender with blue & green, Mother-of Pearl look to finish
CG-707	Woodland Fantasy	CH	Brown with creamy white crystals
CG-708	Moss Agate	CH	Copper float, brown crystals flowing into green
CG-712	Super Spill	CH	Matte opaque white with shades of gray crystals
CG-713	Peacock Green	NC	
CG-716	Pagoda Green	NC	
CG-717	Pistachio	CH	Stable background, crystals become rich blue
CG-718	Blue Caprice	CH	Slightly lighter
CG-720	Blue Marble	CH	Background shades of green; blue, white crystals
CG-721	Candy Corn	CH	Brighter, cleaner orange with glossy white crystals
CG-722	Seawind	CH	Flowing colors of white, blues and greens
CG-723	Reptilian Green	CH	Pewter look with brown and green crystals
CG-730	Clear Enamelware	NC	
CG-750	Noel	CH	Warm white, shades of green, red-brown & blue
CG-753	Sassy Orange	CH	Fades to nothing
CG-756	Firecracker	CH	Fades to nothing
CG-765	Cinnamon Toast	CH	Red crystals become white, background becomes irregular
CG-768	Purple Sage	CH	White bkgd with flowing greens & browns
CG-772	Sand Petal	CH	Gray-brown matte with specks and soft, shiny crystals of green, cream and orange
CG-775	Fox Fire	CH	Dark chocolate brown with white crystals
CG-779	Black Opal	CH	Rich black sheen with blue crystals
CG-780	Mystic Jade	CH	Jade green opalescence with gray-green & brown flowing crystals
CG-783	Strawberry Sundae	CH	Red-orchid background with flowing colors of cream, green & gray
CG-785	Royal Fantasy	CH	Light blue background, dark blue halo around pale blue crystals
CG-786	Obsidian	CH	Opalescent surface of black to navy blue with shades of green
CG-788	Dutch Enamelware	NC	
CG-789	Agate	CH	Opalescent finish of green, blue green & red-purple with green-gold matte float

Jungle Gem™ Crystal Glazes Continued

Item#	Name	Code	Details
CG-790	Autumn Feathers	CH	Fluid gold background with flowing brown shades & gold float
CG-793	Beach Pebbles	CH	Taupe background with greenish brown to deep taupe, more fluid
CG-795	Yadro Print	CH	Grayish background with flowing colors of soft greens & taupe to browns
CG-798	Black Iris	NC	
CG-932	Green Agate	CH	Olive green crystal becomes golden
CG-954	Wildfire	CH	Loses all color
CG-958	Lagoon Blue	CH	Wash of navy with dark blue speck
CG-961	Evergreen	CH	Olive green, no crystals

Astro™ Gem Textural Glazes

All Astro Gems glazes will not have the same texture at shelf cone 6; the surface will be smoother and the crystals will spread out more. The following is data concerning the fired color at shelf cone 6 as compared to normal shelf cone 04 firing.

Item#	Name	Code	Details
AS-510	White Opal	NC	
AS-512	Black Diamond	NC	
AS-513	Golden Sand	XC	The crystal will dominate color, spreading out over most of the glazed area
AS-515	Coral Sand	XC	The crystal will look yellow & the background color will darken
AS-516	Sand Stone	NC	
AS-518	Amethyst	XC	The color will fade to faint pink and the crystals leave pits
AS-519	Green Saffire	NC	
AS-520	Aqua Frost	NC	
AS-521	Star Blue	NC	
AS-523	Gray Granite	XC	Color will become a rich looking brown
AS-524	Terra Cotta	XC	Color becomes red-brown
AS-527	Smoky Topaz	NC	
AS-528	Peach Cameo	XC	The crystal will be light tan and the background medium tan
AS-531	Lapis Blue	XC	Color becomes a rich navy blue
AS-532	Turquoise	NC	
AS-534	Blue Sapphire	XC	Color becomes a darker shade of blue
AS-535	Emerald Green	NC	
AS-539	Gray Quartz	XC	Color takes on a green cast
AS-541	Sea-Blue Topaz	NC	
AS-545	Purple Quartz	NC	
AS-547	Ice Blue	XC	Color remains, crystals become white and splotchy
AS-548	Seafoam Quartz	NC	
AS-551	Peach Frost	NC	

Art Glazes

At shelf cone 6, many of these glazes become more fluid. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
AG-201	Royal Blue	NC	
AG-202	Persian Blue	NC	
AG-203	Flame Blue	NC	
AG-207	Royal Purple	CH	Color is a medium gray-blue
AG-210	Burgundy	CH	Color resembles AG-216
AG-213	Blossom Pink	CH	Glaze becomes clear
AG-214	Tropical Rose	CH	Color fades to a light lavender
AG-216	Orchid Bouquet	NC	
AG-224	Aztec Jade	CH	Color takes on a bluer cast
AG-226	Olive Green	CH	Color takes on a yellow cast
AG-240	Root Beer	CH	Yellowish brown
AG-241	Mango Orange	CH	Glaze is matte and faded
AG-242	Canary Yellow	NC	
AG-243	Golden Rod	CH	Fades to very faint yellow
AG-244	Brown Sugar	CH	Light yellow brown
AG-251	Black Beauty	NC	
AG-252	Danish Blue Ice	CH	Light grey
AG-253	Twilight Grey	NC	
AG-254	Celadon	NC	
AG-256	Peach	NC	
AG-257	Baby Blue	NC	
AG-258	Cobalt Glass	NC	
AG-259	Mesa Mauve	CH	Color fades slightly
AG-261	Santa Fe Turquoise	NC	
AG-263	Purple Iris	CH	Color becomes a grayed purple
AG-264	Silky Plum	CH	Fades to light pink-purple
AG-266	Spruce Green	NC	
AG-291	Raspberry Ice	CH	No Color
AG-400	Lustre Green	CH	Color is comparable to AG-420
AG-404	Golden Amber	CH	Darkens to medium brown
AG-405	Pewter	CH	Glaze is unstable
AG-407	Old Pine	CH	Glaze is matte, color burns away in spots
AG-408	Sirocco Red	CH	Fades to a lavender pink
AG-410	Black Lustre	CH	Glaze takes on a blue hue
AG-414	Tawny Birch	CH	Glaze darkens
AG-420	Autumn Green	CH	Color looks like Terra Cotta
AG-453	Old English	CH	Color is yellow brown
AG-454	Holly Green	NC	
AG-460	Empress White	CH	Celadon with blue float
AG-461	Honeycomb	CH	Lightens
AG-601	White Drape	NC	
AG-605	Gold Filigree	CH	Must be on thick to look good
AG-610	White Foam	CH	Flattens out somewhat
AG-630	Opaque White	NC	

Clear Glazes & Clear Art Glazes

Two coats were painted on greenware for all glazes. At shelf cone 6, many of these glazes become more fluid. If you are a heavy glazer, you may find two coats to be sufficient. Test firing is advisable.

Item#	Name	Code	Details
C-003	Brushing Clear	NC	
C-101	BluWhite Clear	NC	
C-105	Crystal Clear	NC	
BF-100	Brite Strokes	NC	
C-300	Matte Transparent	CH	Becomes glossy and pin-holed
C-340	Clear Satin	CB	Becomes glossy and pin-holed
NM-450	Clear Soft Matte	CH	Becomes glossy
CA-110	Golden Clear	NC	
CA-111	Scandia Blue	NC	
CA-112	SpectaClear	CH	Specks become faint & glaze has yellow cast
CA-113	Blue SpectaClear	CH	Specks melt, looks splotchy
CA-115	Smoky Black	NC	
CA-122	Cameo Pink	CH	Glaze becomes clear with a yellow cast
CA-123	Pongee	CH	Becomes a golden yellow
CA-124	Yadro	NC	
CA-126	Clear Lilac	CH	Color fades to a tint of lilac
CA-130	Taffy Cream	NC	

Exotic™ Glazes

There is a considerable difference between the appearance at shelf cone 06 compared to cone 6. At shelf cone 6 Exotics produce a high luster or matte surface, but results may deviate. Since the shapes and types of ware vary, it is best to test fire the glaze first. At shelf cone 6, many of these glazes become more fluid. If you are a heavy glazer, you may find two coats to be sufficient.

Item#	Name	Code	Details
E-100	Muir Mist	CH	Grey taupe
E-101	Amber	CH	Slight change
E-102	Silver Sage	CH	Sage green lighten
E-103	Midnight Mist	CH	Olive green with teal float
E-104	Sandstone	CH	No color
E-105	Silver Lake	CH	Becomes brownish
E-106	Rose Wine	CH	Lightens to pink
E-107	Tortoise	CH	Olive green
E-810	Oriental Green	CH	Color is brownish green
E-820	Honey Bear	CH	Yellow background with coral float
E-824	Smokey Agate	CH	Medium jade with finely dispersed white float
E-837	Twilight Blue	CH	Green with hint of blue
E-850	Milk Glass White	NC	
E-853	Emerald Green	CH	Color is a medium green
E-881	Turtle Green	CH	Light green yellow matte with green float
E-960	Pumpkin Harvest	CH	Caramel color with light tan float
E-961	Spiced Parchment	CH	Golden with slight flecks of light brown
E-962	Weathered Rock	CH	Yellow tan with green cast
E-963	Desert Moss	CH	Beige with slight brown fleck
E-964	Lily Pond	CH	Color becomes golden with silver float

Jungle Gem™ Crystal Glazes Continued

Item#	Name	Code	Details
E-965	Evening Sage	CH	Washes out to moss green
E-966	Frosted Emerald	CH	Sage green with brown, more matte
E-967	Mottled Aqua	CH	Becomes ivory
E-968	Mountain Mist	CH	Medium green with tan float
E-969	Brownstone	CH	Mottled medium brown
E-970	Heavy Metal	CH	Blackened olive
E-971	Brimstone	CH	Mottled cinnamon brown
E-944	Taffy	CH	Color is light yellow; glaze did not crackle

