



Using Mayco Stoneware Glazes

- An Introductory Guide -



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As in everything we do, Mayco's goal is to help the artist achieve their desired results. There are many variables that come into play when creating a ceramic object: the clay body, glaze selection, glaze application, kiln atmosphere and firing temperature are a few major contributors to the finished product.

The purpose of this brochure is to identify the variables that can affect the outcome of Mayco's Stoneware Glazes and to provide tips for use that will help incorporate them successfully into your studio practice. Mayco's stoneware sample tiles are made with a slip cast, white stoneware body that is fired flat to cone 6 (△) why so you can make them work for you.

There are many variables when talking about stoneware glaze application, so we have broken them down into sections from start to finish for easy reference. The following terms are used throughout this brochure:

Glossary of Terms:

- *Absorbency* - The clay's ability to absorb and retain the moisture within its structure.
- *Vitreous* - Glass in appearance or physical properties. We often refer to it to emphasize a lack of absorbency in part of the unglazed, fired ceramic surface.
- *Food Safe* – A definition used by the FDA to enforce a guideline that measures the amount of lead and/or cadmium that can leach from a fired glaze surface. If it measures below the guideline a glaze will be marked as "Food Safe". All Mayco glazes have been individually tested and meet the FDA guidelines to qualify as food safe.
- *Heat Work* – The combined effect of time and temperature on ceramic piece.

1. Clay Body

The clay body of choice is a major factor in how the glazes will respond.

- *White Clay Bodies* - The images you see in our catalog and chip charts are all fired on white cone(△) 5/6 stoneware. This clay body is low in iron and thus changes the glaze very little.
- *Red/Brown/Speckled Clay Bodies* – Applying glaze to an iron rich clay bodies such as these will change the color and surface the glaze. It is always best to test a glaze to see how it will respond to different clay bodies.

2. Building Technique

The building style of your project can impact glaze application, which then can affect the absorption rate of your clay body. The less absorbent a clay body is, the more glaze sits on the surface. This leaves you with a more saturated color and possible movement depending on the fluidity of the glaze.

- *Hand Built* - Highest absorption of glaze. Three coats of glaze are recommended to resemble the appearance of the Mayco tiles.
- *Wheel Thrown* - Medium absorption. Three coats of glaze are recommended to resemble Mayco appearance of the Mayco tiles.
- *Slip Cast* - Least absorption of all three styles. Two coats are recommended to resemble Mayco tile appearance.

3. Glaze Performance

There are many different types of glazes, each with their own set of properties, please see page five for glaze groupings. Because many glazes respond differently to textures, Mayco's tiles have a smooth side and raised texture side. The following is meant to describe certain qualities of each Mayco stoneware glaze. The first word addresses the "look" while the second refers to movement.

*Note: Mayco's tiles are fired flat so results may vary when fired vertically.

- Breaking/Fluid - Changes colors on highly textured areas or when applied in varied thicknesses. These glazes often flow on vertical surfaces.
- Breaking/Stable – Changes colors on highly textured areas or when applied in varied thicknesses. These glazes have little to no movement.
- Translucent/Fluid - The clay body will be seen through glaze and can create variation on surface texture. These glazes often flow on vertical surfaces.
- Translucent/Stable - The clay body will be seen through glaze and can create variation on surface texture. These glazes have little to no movement.
- Opaque/Stable - The clay body will not be seen through glaze and with solid coverage the color will be uniform. These glazes have little to no movement.
- Crystal/Fluid - Small crystals of material in the wet glaze that will bloom and melt in the firing. The heavier the loading of crystals the more melting will occur. These glazes often flow on vertical surfaces. Keep in mind that increased crystal loading will enhance flow even more.
- Crystal/Stable - Small crystals of material in the wet glaze that will bloom and melt in the firing. The heavier the loading of crystals, the more melting will occur. These glazes are considered stable because the base glaze has little to no movement. Keep in mind, if it has a heavy crystal loading or a lot of crystals near the bottom of the piece, you could see more movement in the glaze during firing.

4. Application Technique

How you choose to apply your glaze will have an effect on your fired results. Mayco offers both wet and dry lines of our stoneware glazes. Our wet glazes (SW line) are ready to use with a brush right out of the pint and our dry glazes (SD line) will need to be thoroughly mixed with distilled water before dipping. You can find more information about our SD line and instructions on how to mix your glaze in our Dry Glaze Studio Guide at: http://maycocolors.com/images/collateral/studio_guide_stoneware_dry_glazes.pdf

- Brushing - A loaded soft fan brush is recommended to apply layers to achieve full coverage with Mayco Stoneware Glazes. To properly load a fan brush for full coverage, dip the whole head of the brush all the way into the glaze and swirl it in the glaze. This way the brush will be completely saturated with glaze. Lift the brush out of the glaze and let the glaze stream off until it starts to drip, then apply to bisque ware. We recommend two-four coats of glaze, depending on how heavy the application. Be sure to allow the coats to dry in between layers. You can enhance variation with some glazes depending on the direction and thickness of your brushstrokes.
- Dipping – All of Mayco's Stoneware Glazes are offered in dry form so you can mix them yourself and dip your wares. Dipping glazes work great for full coverage and combos. When mixed according to package directions, we recommend a single dip to produce results similar to our sample tiles. See how to use our dipping glazes on YouTube here: <http://ow.ly/H33Z30mUahV>



5. Glaze Application:

Whether you choose to use a single glaze or glazes in combination with each other, there are a few things to keep in mind. Mayco Stoneware glazes are food safe if used according to the manufacturer's directions. However, we cannot guarantee that layering or combining two food safe glazes will remain food safe. We are unable to personally test each and every possible combo as there is an infinite number of combinations that would need to be tested by the FDA.

- Single Glaze - If you are looking for predictable results every time, using uniform coats of a single glaze would be best.
- Layering Glazes - Using two or more glazes in combination with each other can create phenomenal new colors, but will require some testing to find the combination that works best for you. For the latest tested combinations from our Mayco artists, check out our Stoneware glaze combo gallery on our website at <http://ow.ly/Goq430mUa63>
- Design Work – Layering glazes and washes with slip trailers, silkscreens, stamps, mats or smaller brushes is a great way to add some extra special details to your piece. See our stoneware project library for some inspiration: <http://ow.ly/Gb4F30mUac6>

6. Firing Style:

How you decide to fire your Mayco glazes can dramatically change the results. Mayco sample tiles are fired on a white stoneware, slip cast body, and fired flat to cone(Δ)6. The temperature, time, and atmosphere are all factors that will affect the result. It is up to you to determine what works best for your practice. The following are some tips to point you in the right direction.

- Kiln Environment – Firing on clean, kiln-washed shelves in a debris-free, vacuumed kiln is going to set you up for success. Always remember to use witness cones to be sure your kiln is firing properly and to help with troubleshooting.
- Kiln Atmosphere – Mayco glazes perform well in oxidation, reduction, wood, soda and salt firings. We have not tested every glaze in every atmosphere, but you can check out our cone(Δ)10 gallery to get a head start on your testing: <http://ow.ly/q1Ni30mUadL> (test tiles were fired flat on a white slip cast body in a cone(Δ)10 reduction atmosphere)
- Temperature – Mayco Stoneware glazes are designed to fire to cone(Δ)6, but we have found that many perform great anywhere from cone(Δ)5 to cone(Δ)10. Mayco Stoneware Matte glazes are recommended for cone(Δ)6 and above. Keep in mind that adding heat work to a glaze will make the glaze more fluid, so leave some space for movement when testing vertically.
 - Cone 5 (mid-range) 1186°C / 2167°F
 - Cone 6 (mid-range) 1222°C / 2232°F
 - Cone 10 (high fire) 1285°C / 2345°F

There are a multitude of components that go into creating a finished ceramic object. We have highlighted what we found to be key points to keep in mind when using Mayco Stoneware Glazes. These should lay a foundation for you to build upon, and we invite you to check out Mayco Mudroom Society on Facebook to check out what others have been doing and find inspiration, and share your own work!

<http://ow.ly/aXPx30mUagn>

Stoneware Glaze Performances

Stock Number	Description	Section
SW-001	Clear	Translucent Stable
SW-002	Matte Clear	Translucent Stable
SW-003	Crackle Matte Clear	Specialty
SW-004	Stoneware Zine-Free Clear	Translucent Stable
SW-100	Blue Surf	Breaking Fluid
SW-101	Stoned Denim	Breaking Stable
SW-104	Black Walnut	Breaking Stable
SW-105	Frost Blue	Breaking Fluid
SW-106	Alabaster	Opaque Stable
SW-107	Dunes	Opaque Stable
SW-108	Green Tea	Breaking Stable
SW-109	Capri Blue	Breaking Fluid
SW-110	Oyster	Breaking Stable
SW-111	Wrought Iron	Breaking Stable
SW-112	Tiger's Eye	Breaking Stable
SW-113	Speckled Plum	Breaking Stable
SW-115	Midnight Rain	Crystal Fluid
SW-116	Robin's Egg	Crystal Fluid
SW-117	Honeycomb	Crystal Stable
SW-118	Sea Salt	Crystal Stable
SW-119	Cinnabar	Opaque Stable
SW-120	Northern Woods	Translucent Fluid
SW-121	Smoke	Breaking Stable
SW-122	Maycoshino	Breaking Stable
SW-123	Sapphire	Translucent Fluid
SW-124	Matte Maycoshino	Breaking Stable
SW-125	Purple Mint	Breaking Stable
SW-127	Olivine	Breaking Stable
SW-128	Cordovan	Opaque Stable
SW-129	Copper Float	Breaking Stable
SW-130	Copper Jade	Breaking Fluid
SW-131	Birch	Breaking Stable
SW-132	Mirror Black	Breaking Fluid
SW-133	Copper Ore	Breaking Fluid
SW-134	Eggplant	Opaque Stable
SW-135	Wintergreen	Opaque Stable
SW-136	Weathered Blue	Breaking Stable
SW-137	Storm Gray	Breaking Stable

SW-138	Lemon Meringue	Breaking Stable
SW-140	Black Matte	Opaque Stable
SW-141	White Matte	Opaque Stable
SW-142	Gray Matte	Opaque Stable
SW-143	Abalone	Breaking Stable
SW-144	Lava Rock	Breaking Stable
SW-145	Tea Dust	Breaking Stable
SW-146	Aurora Green	Crystal Fluid
SW-147	Moonscape	Crystal Stable
SW-148	Lime Shower	Crystal Stable
SW-149	Crackle White	Specialty
SW-150	Celadon Bloom	Crystal Stable
SW-151	Olive Float	Crystal Stable
SW-152	Blue Splatterware	Crystal Stable
SW-153	Indigo Rain	Crystal Stable
SW-154	Shipwreck	Crystal Stable
SW-155	Winter Wood	Crystal Stable
SW-156	Galaxy	Crystal Stable
SW-158	Lilac Matte	Opaque Stable
SW-159	Blue Matte	Opaque Stable
SW-160	Chartreuse Matte	Opaque Stable
SW-161	Yellow Matte	Opaque Stable
SW-162	Pink Matte	Opaque Stable
SW-163	Soft Red Matte	Opaque Stable
SW-164	Satin Patina	Breaking Stable
SW-165	Lavender Mist	Breaking Stable
SW-166	Norse Blue	Breaking Stable
SW-167	Sand & Sea	Breaking Stable
SW-168	Coral Sands	Breaking Stable
SW-169	Frosted Lemon	Breaking Stable
SW-170	Blue Hydrangea	Crystal Stable
SW-171	Enchanted Forest	Crystal Stable
SW-172	Macadamia	Breaking Stable
SW-173	Amber Quarts	Breaking Stable
SW-174	Leather	Breaking Stable
SW-201	Turquoise	Translucent Stable
SW-203	Root Beer	Translucent Fluid
SW-204	Amber Topaz	Translucent Fluid
SW-205	Coral	Translucent Stable
SW-206	Melon	Translucent Stable
SW-207	Chambray	Translucent Stable
SW-209	Charcoal	Translucent Stable

SW-210	Emerald	Translucent Stable
SW-211	Glacier Blue	Translucent Stable
SW-212	Peacock	Translucent Stable
SW-250	White Opal	Breaking Stable
SW-251	Pink Opal	Breaking Stable
SW-252	Blue Opal	Breaking Stable
SW-253	Green Opal	Breaking Stable
SW-255	Gray Opal	Breaking Stable
SW-401	Light Flux	Specialty
SW-402	Dark Flux	Specialty