

Co-Fire Silver Clay & Accent Gold for Silver™

easy new firing technique for 24K gold embellishments

by Mardel Rein

Looking for the beauty of keum boo without all the equipment? Try Accent Gold for Silver™. Accent Gold for Silver™ (AGS) is a pure 24K gold product that is applied like a paint to fine silver and is permanently fused to the surface with something as simple as a butane torch or as fancy as an electric jewelry kiln.

Accent Gold for Silver™ was designed to be applied to freshly fired silver clay articles, but I have found that I can apply AGS to unfired silver clay and sinter the silver and gold together using a torch or jewelry kiln. I've also developed a very simple method of mixing the liquid media into the AGS powder that saves every drop of the gold because no tools are used.

1

Mixing

Open the Accent Gold for Silver™ container and add 8 drops of the provided liquid media* to the gold powder using the dropper. Agitate the liquid in the container by shaking it quickly back and forth to fully wet and incorporate the powder. The mixture will ball up like mercury when it's almost ready, about 15 to 20 seconds.

Light patches on the surface of the gold glob are unincorporated gold. Continue agitating until the color is uniform. The consistency should be smooth and creamy, but not runny. If the mixture is thin and drippy, allow it to sit open for a few minutes to evaporate some of the water, then check again.

2

Application

Accent Gold for Silver™ can be applied to dry or surface-dry silver clay using a paint brush, clay shaper or any other tool that you deem usable for this purpose. Paint, draw or drizzled it on,

For flat, broad areas, try a #3 Red Sable paintbrush. For drizzled designs, try a Clay Shaper. I like the Flat Chisel Clay Shaper because it gives a precise line and it also works well as a squeegee for the gold container. Because it's silicone, the gold flakes right off for easy recovery.

Apply one or two even coats. Spread the material out and do not allow it to puddle in crevices or to "clog" up texture or a design. It will be difficult to burnish later. Allow AGS to dry between coats.

Accent Gold for Silver™ should be applied sufficiently thick that the silver below cannot be seen through the gold. The surface should be even and fully opaque, paying special attention to edges.

3

Firing

By Torch

Simply fire the item with the torch for 2 minutes. Heat until the silver glows a dull salmon color. The gold will glow very bright orange. Keep your eye on both of these colors and hold for 2 minutes at this color, raising and lowering the torch to regulate the temperature and hold it.

Kiln Firing

To co-fire Accent Gold with silver clay in a kiln, the kiln must be pre-heated and the wares must be taken in and out of the kiln while it is still hot. It's easiest to remove the entire kiln shelf than trying to take out individual pieces, so be prepared with a firing glove and tongs for fast insert and removal. Kiln tongs are a great accessory for moving a kiln shelf in and out of the kiln safely and quickly. Refer to the firing schedule on the next page.

Co-Firing Silver Clay & Accent Gold for Silver Kiln Firing Schedule

Target temperature must be in the range of sintering.

20 minutes in a kiln pre-heated to 1110F

20 minutes in a kiln pre-heated to 1250F

20 minutes in a kiln pre-heated to 1470F

20 minutes in a kiln pre-heated to 1650F

4

Finishing

- After firing, allow to cool, then burnish the gold firmly with a curved burnisher or in a tumbler, then polish and finish as desired. Keep in mind that 24K gold is very soft and easily abraded. Do not use aggressive abrasives that remove material. Use polishing grits and buffs. For a highly polished surface the curved burnisher followed by buffing or tumbling with mixed jewelry shot works very well.

Tips!



Design

- Accent Gold for Silver™ is best on smooth, flat or low relief surfaces. It is difficult to burnish tight areas after firing, so textures with fine lines are not a good choice for adding AGS as the gold tends to "clog" up the lines and obliterate the texture.
- You can use stick-on type templates as a mask to apply Accent Gold™ in intricate patterns and designs. For best results, use the template on a flat surface, burnish to seal the edges. Apply Accent Gold™ with a small flat brush. Paint past the edges. After the second coat, has dried, peel off the template over a piece of clean white paper. The pattern will come away clean leaving dried gold on the template surface. Scrape the dried bits back into the container to use again later.
- Check the manufacturers firing schedule for the clay you want to use. If it can be properly sintered in 20 minutes at any temperature between 1110F and 1650F, it is a good candidate for co-firing. You'll also have to determine if the item you wish to make is suitable for a shorter firing. Torch firing could be safely extended to 20 minutes if you could stand it, but I personally don't torch fire longer than 2 minutes. The longest, hottest firing recommended for co-firing is 20 minutes at 1650F, which is decent firing for strength. If you feel the item you want to add gold to needs a longer firing you'll have to fire your silver first and then add the Accent Gold™ to the freshly fired surface and torch fire for 2 minutes or kiln fire for 20 minutes at 1110F. Firing beyond 20 minutes in a kiln will result in partial alloying of the gold into the silver. If the firing is too short, the bond will not be complete.



Storage

- I discard the black washer that comes with the container of Accent Gold™. I find that these prohibit an airtight seal. Simply screw the lid onto the jar tightly to store mixed Accent Gold™. If you don't intend to use it for a few days, check the moisture of the mixture and add a drop of two of media as needed to keep it hydrated.
- When the media runs out, refill the container with distilled water and add 1 drop of glycerine. Shake before use.



Thrifty Tips!

- Any bits of dried gold from a brush or any other tool you use can be added back into the Accent Gold for Silver™ container for re-use.
- When the media runs out, refill the container with distilled water and add 1 drop of glycerine. Shake before use.
- If the material ever dries out completely, just add a couple of drops of liquid media and allow it to rehydrate. An angle chisel Clay Shaper works great for scraping down the sides of the container without losing any material..