



AGS™ - Accent Gold for Silver™

Please read these instructions carefully before you start!

About Accent Gold for Silver

This product consists of one gram of pure 24 K gold powder dispersed in a non-toxic water based medium. It is used to apply gold accents to fine silver jewellery articles, including those prepared from silver clay.

AGS is applied with either a brush to an already-fired silver piece, followed by drying and then heating the piece to bond the gold powder to the silver. After cooling, the gold layer is burnished and final finishing techniques are applied.

How to use AGS

AGS is prepared as a thick slurry so that it can be applied by daubing as well as brushing. Allow it to stand upright for a while before opening the bottle, so the paint isn't all over the inside of the lid when you open it. Thin the paint with a drop of water if needed, but do not thin it too much, or you won't be able to apply it in a sufficiently thick layer. Mix the paint with a straightened paper clip or a sewing needle (to minimize adherence).

If the AGS is to be used on an item made from silver clay, fire the item first per the manufacturer's instructions and allow it to cool. Do not burnish the fired silver piece before applying AGS – if the surface remains rough it will help the gold bond with the silver.

If the piece has been handled after firing, be sure the area is clean and has not been contaminated with oils or dirt. If it has, re-fire it briefly.

Apply AGS by using a small clean artist's brush, being careful not to get it on unwanted areas. Be sure the brush is new or has only been used for AGS. Apply the AGS in a reasonably smooth, thick layer. Daubing of the paint is preferable to brushing because it can be applied more easily in a relatively thick layer. Add several thin layers, or just one thick layer. For several thin layers, please refer to step 5 under Torch Firing. The key to achieving a beautiful 24K layer after just a single firing is to apply the AGS in a fairly thick layer.

Drying AGS

Allow it to dry thoroughly. If you have applied a layer thick enough so that none of the silver base can be seen, you are ready to fire the piece. If any of the silver can be seen through the layer, apply a second coat, and again dry the piece thoroughly.

Drying should be done in room temperature, or in an oven at about 90°C. Don't dry the paint too fast, such as with a hot hair dryer, or it may not adhere well to the silver after firing. A cool setting on a hair dryer is fine.

If there is AGS on an unwanted area, remove it by scraping with a needle or small knife after it has dried and return it to the bottle for reuse.

Firing AGS

When dry, you are ready to fire your AGS, this can be done with a kiln or a torch.

Method 1 – Firing in a kiln

Fire the piece by putting it into a kiln or furnace preheated to 900°C (1650°F). Exposing the piece to the proper temperature and time is **essential** to achieve good adherence of the AGS to the silver.

The kiln shelf must **already be in the preheated kiln**, at the correct firing temperature.

Using 18" long tweezers and a glove, lay the piece on the preheated kiln shelf, close the kiln door, wait until the temperature returns to 900°C (+/- 10 degrees C). Then start timing, and fire for seven minutes (Please refer to safety precautions below). Firing for a slightly longer time won't cause a problem if the AGS is sufficiently thick; if it isn't, some fading of the gold colour may occur due to diffusion of silver into exposed surface of the gold layer.

You can fire more than one piece at once, but the time required for the kiln to return to 900°C might be longer if more silver is used. After firing for seven minutes at 900°C, remove the piece and allow it to cool in air.

If coverage of the gold is not complete, apply more AGS in the areas where the silver is showing, dry the piece, and fire it again.

Burnish the gold layer with a polished burnishing tool. An agate burnisher is ideal for this, as it won't scratch as easily as a metal burnisher might do. A matte finish can then be applied with a wire brush, or a beautiful lustre can be achieved by tumbling the piece with stainless steel shot in water.



Method 2 – Firing with a torch

This method requires skill in torch firing because it is more challenging to maintain proper temperature control. The following instructions are provided courtesy of Tonya Davidson of Whole Lotta Whimsy, who has used them with repeated success.

- 1) Fire the silver clay piece per the manufacturer's instructions in a kiln or by a torch.
- 2) After cooling, remove the piece being careful being not to touch the areas where the gold will be applied. (Avoid oils from fingers.)
- 3) Add one or two coats of Art Clay 650 Paste, or PMC3 Paste, to the areas where the gold will be applied. The paste should be thick, like custard - do not water it down to a thin consistency.
- 4) Dry either naturally, with a hair dryer on low setting, or in a dehydrator. Do not use a griddle or hot plate because they dry the paint too quickly.
- 5) Apply three coats of AGS in thin layers. Two layers will yield a subtle gold application. Dry each coat as described in Step 4.
- 6) Place the piece on a ceramic fibre firing brick and dim the lights in the room.
- 7) Begin torch firing.
- 8) Once a medium-orange glow is present, continue firing for seven minutes.
- 9) Cool and burnish as desired.
- 10) If desired (not necessary), hold the piece with tweezers immediately after removal of the torch and use a Pyrex, agate, or steel burnisher to burnish the gold onto the surface of the piece. This will add a final keum-boo method to the process.

Safety Precautions

This paint is non-toxic, non-irritating to most people, and generally safe to use. If you experience a skin rash or itchiness after contact, discontinue use. Wash your hands after each use. If AGS™ gets in the eyes, flush them thoroughly with water and see a doctor to ensure that the gold powder and medium are completely removed. To avoid burns when inserting pieces into a kiln and removing them, wear gloves*, safety glasses, and use a long pair of tweezers (18 inch is recommended). Avoid prolonged exposure of eyes to the hot kiln, which in extreme instances can cause cataracts. If you are concerned about the degree of eye exposure, wear #3 welding glasses. **As long as your hand doesn't get too close to the heated interior of the kiln, most any glove not made of synthetic materials is appropriate such as an oven mitt, leather glove or a specialized heat proof glove. Just keep a watchful eye on the glove to avoid problems. Remember – safety first!*

For more information about this and related products, please contact SilverClay on info@silverclay.co.uk

AGS is created and manufactured by Dr. Ronald Diegle, Jewelry Material Innovations.
SilverClay is the European distributor of AGS.