

AGS™ - Accent Gold for Silver™

For best results it is essential that you follow these instructions carefully! These instructions, dated 2/16/2005, supersede all

About This Product

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 jewelry articles, including those prepared from silver clay. AGS™ is applied with 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 the final finish is applied.

Note: AGS™ in the enclosed bottle is prepared as a thick slurry, and can be applied by daubing as well as brushing. Thin the paint with a drop of water if needed, but do not thin it too much or you will not 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).

How to Use Accent Gold for Silver™

Method 1 – Firing AGS™ in a Kiln or Furnace

If 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™, so that the surface remains rough to promote good adhesion. Be sure the area to receive AGS™ remains clean and is not contaminated with oils or dirt. If it is, briefly re-fire it. Then 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 been used only for AGS™. AGS™ can be used successfully by applying either one **thick** layer, or by building up several **thin** layers. For the latter technique please refer to Step 5 in the following section on Torch Firing. If using a single thick layer, then daubing of the paint is an alternative to brushing for applying the thick layer. In either case, dry the paint as described in Step 4 in the section on Torch Firing. Do not dry the paint too fast or it may not adhere well to the silver after firing. If there is AGS™ on an unwanted area, remove it by scraping with a needle or small knife after it has dried and then return it to the bottle for reuse.

Fire the piece by putting it into a kiln or furnace preheated to 1650F as described in the following paragraph.

Exposing the piece to the proper temperature and time is essential to achieve good adherence of AGS™ to the silver. *The kiln shelf must already be in the furnace and at the firing temperature.* Using 18" long tweezers and a glove, simply lay the piece on the preheated kiln shelf, close the kiln door, wait until the temperature returns to 1650°F (+/- 20 degrees F) and then continue firing for 7 minutes. (Refer to safety precautions below.) Firing for a slightly longer time will not cause a problem if the AGS™ is sufficiently thick; otherwise, some fading of the gold color may occur due to diffusion of silver into the exposed surface of the gold layer.

You may fire multiple pieces at once although the time required for the kiln to return to 1650F will be longer. After firing for 7 minutes at 1650 +/- 20 degrees F, remove the piece and allow it to cool. If coverage of the gold is not complete or it has been applied too thinly, apply more AGS™ in those areas, dry the piece, and re-fire it.

Burnish the gold layer with a polished burnishing tool. A matte finish can then be applied with a wire brush, or a beautiful luster can be achieved by tumbling the piece with stainless steel shot in water.

Method 2 – Firing AGS™ with a Torch

- 1) Fire the piece per the manufacturer's instructions in.
- 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 metal clay paste type 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 solderite torch board 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 Dr. Ronald Diegle at:

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