#### INSTRUCTIONS

Thank you for purchasing ART CLAY SILVER 650 / Syringe Type.

Please read the instructions and directions carefully before use.

#### WARNING

- Bubbling can occur during firing if the clay is not dried enough.
- •During the firing process, oxygen is consumed and smoke and gas emissions may result. Always be sure to ventilate the workroom well.
- ●Do not place the oven-hot fired clay on or near by any inflammable objects. It may cause a fire.

#### **CAUTION**

- Take care not to get burned by the heated clay when drying, firing, and after firing.
- Keep this product out of the reach of children.
- If you get any of this product in your eyes or mouth, flush immediately with plenty of water and call your physician.

### [CHARACTERISTICS]

- ●ART CLAY SILVER 650 consists of pure silver particles, binding agent and water. The binding agent is produced from harmless pulp fiber.
- •During firing, the pure silver particles solidify. The binding agent consists of carbon, hydrogen and oxygen, which when fired together results in the release of harmless carbon dioxide and steam.
- This product is low-fire clay that can be fired from  $650^{\circ}$ C/1200° F, and turns into pure silver (99.9%) after firing. The special formulation of this product allows for its combination with glass, porcelain and ceramic materials, and is also suitable for firing with sterling silver findings or wires (use of SV925 and higher quality is recommended and the firing temperature at  $650^{\circ}$ C/1200° F, holding time for 30 minutes recommended).

\*Do not fire soldered pieces with 650, as the soldering temperature is lower than the firing temperature.

# [INSTRUCTIONS]

- This product is water-based and can dry up. Always keep the syringe tightly capped.
- ●By using syringe type, you can draw designs directly on pieces (clay type or paste type) and create subtle patterns which used to be difficult to produce with conventional materials. ●The piece should be fired only after complete drying. ●Attach the nozzle firmly on the tip of the syringe. If it is too loose, the nozzle may come off when pushing

out the clay. The tip of the nozzle is delicate. Do not squeeze it on a hard surface. When shaping or designing with the syringe is finished, put the protection cap on and wrap over the nozzle with a wet tissue or gauze to avoid drying. After using the syringe, make sure to clean out the remaining clay in the nozzle. You may use a nozzle cleaner (an empty syringe, optional) • Some kilns show a different temperature from the actual one. It is known that silver will melt at 961°C/1763° F. It is recommended that your firing temperature does not exceed 900°C/1652° F. ● You may combine any unused portion of 650 with the original clay series (clay, paste and syringe types), but the firing condition should be same as with the original clay series. •You may combine any unused portion of 650 with other 650 series (clay, paste and syringe types). This product and attachments are designed only for ART CLAY SILVER work. Do not use for other purposes. 

Because the nozzle is a sharp object, do not point the nozzle of the syringe at a person's face, especially the eyes. • It may cause cracking during firing if the clay is not dried enough. •Do not bend the fired piece with unreasonable pressure. • Keep the clay indoors out of direct sunlight. • Do NOT keep in a refrigerator. • Use it soon after unsealing.

### [DIRECTIONS]

### **PREPARATION**

Remove the protection cap from the syringe and attach the nozzle to the syringe. ● Because the piece will shrink 8~9% during firing, consider its finished size. ●Push out the clay from the tip of the nozzle with even pressure and draw a design. ●Do not draw on an ordinary sheet of paper. Draw only on a paper that is detachable after the clay dries up (e.g. wax paper for microwave ovens, cookie sheet, etc.). ●When the Syringe Type clay is used as an adhesive, apply it to both of the pieces until they fuse together without a seam. ●After use, take off the nozzle and replace it with the protection cap to seal the tip of the syringe.

## **MOLDING&DRYING**

<Condition for Drying>

It is necessary to dry the clay completely, so dry it in the following ways:

- Hair dryer: Approximately  $10\sim15$  minutes with 1200w hair dryer. Place the dryer within  $5\sim10$  cm/3 inches from the piece.
- Food Dehydrator: At least 10 minutes at 60°C/145° F
- Oven: At least 10 minutes at 180°C/330° F
- Cooking plate: At least 10 minutes at 150°C~180°C/300~330° F
- Kiln: At least 10 minutes at 150°C/300° F

- Natural dry: At least 24 hours at room temperature.
- \*Do not apply heat over  $250^{\circ}$ C/ $480^{\circ}$  F, otherwise the binder burns away before firing and the shape of the piece can change.

## How to Tell When the Piece is Dry Enough

Take the still-warm piece and place it on some stainless steel, glass or plastic—sheet . After  $10\sim20$  seconds pick up the piece. If there is no cloud of water vapor, it is dry.—(It is easy to check for condensation on—black stainless steel, glass or plastic.). If the piece is cold, warm first by hot air dryer for five minutes, then conduct the test as—explained above.

#### FIRING

#### <Kiln Firing>

To fire, place the piece in a cold or warm kiln (below 300°C/570° F recommended). It is safest to start with a cold kiln. Take at least 15 minutes to reach firing temperature. You may use any of the recommended firing temperatures and hold times listed below. If you are combining with other materials (e.g. man-made stone, glass), please check the appropriate firing temperature and hold time. If you are firing more than two pieces together, make sure the pieces are not touching each other)

Firing temperature  $650^{\circ}\text{C}/1200^{\circ}$  F  $700^{\circ}\text{C}/1290^{\circ}$  F  $750^{\circ}\text{C}/1380^{\circ}$  F  $780^{\circ}\text{C}/1435^{\circ}$  F and higher

Holding time At least 30min. At least 15min. At least 10min. At least 5min.

- \*The shrinkage rate of 8-9% will not change with any firing conditions above.
- \*\*You may fire 650 using a gas torch or on a cooking gas stove. Some restrictions and conditions apply. Please ask for the details from your supplier. If firing only syringelined pieces, we recommend that you fire with a kiln. You can not fire syringe-decorated pieces with core materials inside (cork clay, paper clay, etc.) with a gas torch or on a cooking gas stove.

### **COMPLETION**

- ●The surface of the fired piece will be white and matte due to crystallization of silver during firing, but a luster can be obtained by polishing.(e.g. Stainless brush, Burnisher, Sandpaper, File, etc.)
- The completed piece is pure silver(99.9%).

[How to clean nozzle with an empty syringe]

1. Pull out the plunger of the empty syringe to have air inside of the syringe, then attach the used nozzle on the tip of the empty syringe. Insert plunger back into the syringe. 2.Push out the remaining clay into a container, such as ART CLAY SILVER Paste Type container or a 35mm film case, which can be capped and sealed afterward. \*When mixing with PASTE TYPE, make sure to mix completely together.

3.Rinse the clay out of the nozzle by dipping the nozzle into water and rinse it out by pulling water in and out of the syringe applying a piston stroke. \*Make sure to rinse completely. Dried remains of clay may ruin the nozzle.

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·Manufacturer:

Aida chemical industries Co., LTD.

http://www.artclay.co.jp/