

Art Clay World USA

Art Clay Silver™ “Summer Fun” Brooch

This brooch is simple to make, fashioned after a fresh, summer leaf with whimsical dangling charms. Although this version features summer, try making small acorns and tiny oak leaves dangling off of an oak leaf to create a fall fashion statement!



Tools & Materials

20 gm Art Clay Silver 650/1200 Low Fire Slow Dry Clay
Brooch Pin Finding
15 Sterling Silver Headpins 1 ½”
4” Fine Silver Wire
Small Plastic Bag for storage
Fresh leaf with interesting shape and veining (furry leaves are not recommended)
Acrylic roller
Pair of 1 mm plastic slats
Non-stick work surface
Plastic Underlayment
Rubber Block
Craft Knife
Olive Oil
Paint brush (fine tip and flat)
Small straw segment
Mini Files
600, 1200 grit wet/dry sandpaper
Sanding papers – 400, 600, 1200, 4000
Stainless steel brush
Agate burnisher
Round nose pliers
Jewelry pliers

- ❖ **Drying Methods** – may include hairdryer, oven or toaster oven set below 250°F, food dehydrator warming tray. Piece may also be left to dry naturally. (See *Drying Chart*)
- ❖ **Firing Methods** – electric kiln (programmable is preferred), hand-held butane torch, or gas stovetop burner. (See *Firing Chart*)

Instructions:

- The key to this project is a well defined leaf, with good veining on the reverse as well as an interesting shape. Be sure to keep the leaf fresh – snipping from the plant shortly before you plan on beginning your brooch. If preservation is necessary, layer your leaves between damp paper towels and insert into a re-closeable plastic bag. Refrigerate or keep as cool as possible.
- While working with Art Clay Silver (or any metal clay) the secret is to keep it moist until you are ready to dry it. Small baggies, plastic wrap, a clay keeper jar, Tupperware or Rubbermaid, all work well to keep your clay moist. Keep a spritzer bottle handy to mist pieces, just in case. Try, also, to stay out of the direct line of fans, air conditioners and heating vents. All tools for the needed project should be at a fingers reach away so you are not searching while your clay is drying out.
- Set up your tabletop with the black underlayment on the bottom, the Teflex sheet next, with the 2 plastic slats on either side of the Teflex. These will be used as thickness guides for your brooch.
- Put a drop of olive oil on your hands and rub in well to distribute. Also, rub across your roller. PLEASE, WIPE OFF ANY EXCESS OIL. Too much oil will cause the clay not to stick even to itself! The purpose of the oil is to prevent your hands from sticking to the clay and to prevent your hands from removing moisture from the clay – as a moisture barrier. Again, a very little is best!
- Remove your leaf from the plant (or plastic bag). If there is anything you wish to trim on the leaf, such as alter a shape a bit, now is the time. Cut carefully with your craft knife.
- Set your collection of beads along the leaf to determine where and how many holes you will be making in the soft clay. (Keep track of this info – you will need it later)

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- Open the 20 gm package of Art Clay 650 Slow Dry. Pinch off approximately 5-7 grams, place it in the small bag provided. This will be used for the long vein which becomes the stem.
- Roll the remaining clay between the slats to form a nice, smooth, even, surface. Shape as you are rolling, changing directions as you roll to elongate areas as needed. You are working to shape your clay to the shape of your leaf.
- Remove the slats from the work surface. Place your leaf, face up, on the clay surface. Take your roller and with firm, even pressure, roll once over the leaf, from end to end. Do not attempt to re-roll for a deeper impression, as you will muddy the impression. Roll only once. If you are not happy with your impression, pick up your clay and re-roll it out. Then, lay the leaf down and roll again, this time with a bit more pressure. Do not press too hard so that your clay thins out too much, as breakage may occur.
- Trim leaf edges if needed. If only smoothing is needed, use your wide tip paintbrush with water and blend.
- Using the straw segment, make holes for your dangles. Remember to include the 2 which will act as button holes above the vein area. Press, twist, lift. This action usually ensures that the centers will come out with the straw. Clear the straw by blowing gently. Save the centers – roll up into a ball and add to your bag.
- Set leaf aside.
- Next, roll out your vein. Take all except 1-2 gm of clay out of the bag. Roll into a tapered log shape using the glass square. The glass ensures a smooth, even surface. To taper, angle the glass slightly. Light pressure is all that is needed or the glass will flatten the Art Clay.
- Remove the last little bit of clay from the baggie. You will use this to make paste to attach the vein to the leaf. Add just a couple drops of water to form a thick paste. Art Clay Silver also has paste and syringe formulas which may be used for the next step.
- Position your “log” vein along the vein impression the natural leaf made. Using the fine tip brush, place paste along the impression and quickly place the clay vein in place.
- Blend any extra paste that oozes from beneath the vein into the piece. You do not want to see any spaces under the clay vein. It should look as one with the leaf itself – with no air bubbles.
- Dry for approximately 10-15 minutes. (You may do this on the Teflex sheet. After the piece has been drying for about 5 minutes or so, remove the Teflex so it may dry thoroughly.)
- Remove from dryer and let it cool.
- Now is your time for finishing. Refine all edges; sand the vein with 400, 600, and 1200 sanding paper. The object is for the vein to have a mirror finish. The rest of the leaf should be refined – use a tool to deepen any areas that you think will need enhancing.
- Turn the piece over. You will now place the pin.
- As you have a long piece, you have been given a long pin. Hold the pin approximately 1/3 from the top edge of your leaf. Place the hinge end in approximately 1/2” to 1/4” in from the end of your vein stem. Lay the pin along the line where the pin will be set in place. Remembering that Art Clay will have 8-9% shrinkage and allowing for that shrinkage, set the receptacle in place so that just the tip of the pin is exposed. After shrinkage, this tip will be captured under the receptacle. Using a tool, scribe the location of the hinge and receptacle. Remove all pieces.
- Scribe a small impression into the dried clay, the size of the footprint of each piece. Re-check each piece for fit.
- Use paste to secure the feet of the ends into the clay surface. Blend with paste to make a nice, smooth finish. Dry.
- Examine the back of your piece after drying. Fill in where needed with additional paste and re-dry.
- Remove from dryer. Give a close examination to detail. Make sure smooth surfaces are smooth and that the footprint of your hinge end and receptacle are well imbedded and look a part of the piece. Check the front again – make sure there are no dings in your mirror finish vein!
- Kiln fire at 1200° for 30 minutes.
- Remove from kiln and brush with stainless steel brush.
- Use agate burnisher to burnish areas on the leaf, as well as to bring up the mirror shine on the vein.
- Use jewelry pliers to set pin, squeezing gently, but firmly. You want the pin to move freely.
- Set your dangles with the headpins provided.
- Cut the fine silver wire into two pieces. Curl one end of each into a spiral. Thread through the “buttonhole” of the piece and secure your button. Finish the ends by curling them into spirals. Position them as you wish to hold the button in place and enhance the area.
- You may also add dangles to the silver wires holding the button if you wish.

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Drying Chart for Art Clay Series

	Drying Time			
	Hot Air Dryer	Cooking Plate	Kiln	Air Dry
ACS 650	More than 10 min.	More than 10 min. at 150°C / 302°F		More than 24 hrs.
ACS 650 Slow Dry	More than 45 min.	More than 20 min. at 150-180C / 302-356°F		Not recommended
Overlay Silver Paste	More than 10 min.	More than 10 min. at 100C /212° F		More than 60 min.
ACS Basic	More than 15 min.	More than 10 min. at 150C / 320°F		More than 24 hrs.
ACS Basic Slow Dry	More than 45 min.	More than 20 min. at 150-180C / 302-356°F		Not recommended
ACS Paper type	No need to dry			
ACS Oil Paste	More than 30 min.	More than 30 min. at 100C /212° F		More than 24 hrs.
AC Gold Clay type	More than 15 min.	More than 10 min. at 150C /320° F		More than 24 hrs.
AC Gold Paste type	(Undiluted) More than 5 min.	Not recommended		(Undiluted) More than 15 min.
	(Diluted) Depending on the medium amount.	Not recommended		(Diluted) NO

- Test pieces used for this chart are in 5g clay volume.
- Hot air dryer used for this chart is 1200W and 3-4 cm from the drying pieces.

Firing Chart for Art Clay Series

	Firing Temperature / Holding time (Kiln firing)								Other Methods	
	650°C 1202°F	700°C 1292°F	750°C 1382°F	780°C 1436°F	800°C 1472°F	850°C 1562°F	870°C 1598°F	990°C 1814°F	Stove top	Gas torch
ACS 650	30min.	15min.	10min.	5min.		/			YES	
ACS 650 Slow Dry	30min.	15min.	10min.	5min.					YES	
Overlay Silver Paste	30min.	15min.	10min.	5min.	0min.	/			WHEN USED WITHOUT GLASS OR CERAMICS	
ACS Basic	(Holding time/ Fire from cold kiln)				30min.					
ACS Basic Slow Dry	/				30min.	20min.	10min.	YES		
ACS Paper type					/				30min.	20min.
ACS Oil Paste	/								30min.	10min.
ACG Clay type					/					
ACG Paste type	Application on fired ACS 500°C(932°F) → 800°C(1472°F) / hold 5min.									
	Application on porcelain surface Cold kiln → 800°C(1472°F) → switch off → under 100°C(212°F) to take out								NO	
	Application on glass surface Cold kiln → 800°C(1472°F) / hold 5min. → crash cool to 600°C(1112°F) → close kiln door → natural cool to take out									

- Test pieces used for this chart are in 5g clay volume.

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