

Art Clay Overlay Silver Paste

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Art Clay World, USA

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[Characteristics]

Art Clay Silver 650/1200 Overlay Silver Paste (OSP) is "low-fire" silver clay in paste form, formulated specifically to use on glazed porcelain. Overlay Silver Paste is in a viscous, liquid form and water soluble, so that you can express 3 dimensional drawings on a surface of porcelain, ceramic or glass. After firing at appropriate temperature ranging from 650^{°C}/1200^{°F} to 800^{°C}/1472^{°F}, it will turn into 99.9% silver. During firing, the pure silver powder solidifies. The binding agent consists of carbon, hydrogen and oxygen resulting in the release of harmless carbon dioxide and steam during firing.

[Instructions]

Some silver settling may occur at bottom of the jar. Stir the paste well with a brush or metal spatula before use. This product is water-based and can dry. Always keep the container tightly capped. If it dries, add a small amount of water to re-hydrate. To dilute the paste, take out the necessary amount and place it in a separate container. Then, add water a drop at a time. Do not dilute it directly in the bottle. It is important that your kiln's pyrometer is functioning properly. Always be sure to ventilate the workroom when using a kiln.

[Directions]

Preparation	<ul style="list-style-type: none">• Clean the surface of the ceramic or porcelain with alcohol or soap and water to remove dust or oil which may interfere with the OSP sticking to the surface.• Thin the OSP with water to the consistency needed in order to paint the surface.				
Overlaying	Recommended thickness is less than 0.5mm. If the application is too thick, it may delaminate from the porcelain surface with the glaze after firing or by polishing.				
Drying	<p>The applied paste must be completely dried before firing. It may be dried in the following ways:</p> <ul style="list-style-type: none">• Hair dryer: At least 10-15 minutes with 1200w hair dryer. Place the dryer within 15cm/6 inches from the piece.• Food Dehydrator: At least 10 minutes at 60^{°C}/145^{°F}• Oven: At least 7 minutes at 180^{°C}/330^{°F}• Hot plate: At least 7 minutes at 150~180^{°C}/300-330^{°F}• Kiln: At least 7 minutes at 150^{°C}/300^{°F}• Air drying: At least 1 hour at room temperature <p>*Do not apply heat above 250^{°C}/450^{°F}, or the binder will begin to burn away</p>				
Firing	<p>You must fire the piece with a programmable electric kiln, which is equipped with a temperature control.</p> <ul style="list-style-type: none">• To fire, place the piece in a cold or warm kiln (below 200^{°C}/390^{°F}). Take at least 15 minutes to reach firing temperature.• Ramp the kiln to the appropriate temperature depending on the kind of porcelain, glass, ceramic or type of your project. Please see below as your reference. Take at least 15 minutes to reach the firing temperature. <p>1. Firing OSP applied to porcelain piece</p> <table border="1"><tbody><tr><td>Firing Temperature</td><td>650^{°C}/1200^{°F} ~800^{°C}/1472^{°F}</td></tr><tr><td>Holding Time</td><td>Not Needed</td></tr></tbody></table> <ul style="list-style-type: none">• After reaching the selected temperature, turn off the kiln and cool down to 100^{°C}/210^{°F}.	Firing Temperature	650 ^{°C} /1200 ^{°F} ~800 ^{°C} /1472 ^{°F}	Holding Time	Not Needed
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Holding Time	Not Needed				

2. Firing OSP applied on porcelain piece with combination of Art Clay Silver 650/1200 type.

Firing Temperature	650 ^{°C} /1200 ^{°F}	700 ^{°C} /1290 ^{°F}	750 ^{°C} /1380 ^{°F}	780 ^{°C} /1435 ^{°F}	800 ^{°C} /1472 ^{°F}
Holding Time	30 min.	15 min.	10 min.	5 min.	Not Needed

- After reaching the selected temperature, turn off the kiln and cool down to 100^{°C}/210^{°F}.

3. Firing OSP applied on porcelain piece with combination of Art Clay Silver original type.

Firing Temperature	800 ^{°C} /1470 ^{°F}
Holding Time	Not Needed

- After reaching 800^{°C}/1470^{°F}, turn off the kiln and cool down to 100^{°C}/210^{°F}.
- Do not fire at more than 800^{°C}/1470^{°F}.
- Take out the piece after kiln's temperature drops down below 100^{°C}/210^{°F}.

* Quickly cooling the piece, such as quenching, may cause it to crack.

Completion

- The surface of the fired piece where OSP was applied will be white and matte due to crystallization of silver. A luster can be obtained by polishing. (e.g. Stainless Steel brush, files, sandpaper or agate burnisher, etc.)

[Precautions]

- Keep this product indoors out of direct sunlight.
- Do NOT keep in a refrigerator.
- Use it soon after opening.
- When drying and firing, take care to prevent burns or fire.
- Ventilate your workroom well during 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.
- Avoid contact with your skin. If skin irritation or itching occurs, wash with water and consult your doctor immediately.
- Do not place a ceramic or porcelain piece that has the Overlay Silver Paste applied into a microwave oven.
- It is important to follow the recommended instructions when using the Overlay Silver Paste in order to insure a successful firing.

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