

# Liver of Sulfur Technique

## Materials

Dry liver of sulfur chunks (LOS), 2 glass or ceramic cups, wooden, plastic or other non metal stirrer, baking soda, tweezers or unwanted piece of wire, approx. 6" long, household ammonia, water, drying cloth or paper towels.

## Technique

1. Clean your piece thoroughly with a paste of baking soda and water. Dry.
2. Microwave or otherwise heat 1 cup of water until steaming, but not boiling. Fill second cup with cold to room temperature water for rinsing.
3. Place a thumbnail-sized chunk of liver of sulfur into the steaming water and stir until dissolved. Measure approx. 1 tsp. of ammonia and add to LOS. Mix well.
4. Grab cleaned Art Clay piece firmly with tweezers or make a hook at one end of the wire and string piece on it.
5. Dip quickly into LOS and then into clear water. Dry.
6. If color is not satisfactory, dip again until desired color is obtained, rinsing and drying after each dip.
7. When completed, dry piece thoroughly and, if desired, rub with silver polish on a soft cloth, brush with stainless steel brush, or use a miniature power tool to remove patina from raised areas for maximum contrast.



## Tips

- LOS will go through the following color changes: gold, amber, magenta, blue, black. The intensity of the color changes depends on a number of factors.
- The degree to which the piece has been polished. The higher the initial polish, the brighter the colors.
- Whether ammonia has been added. Colors will be more intense and brighter with ammonia.
- The temperature of the water. The cooler the water, the longer it will take to change color and the duller the colors will be.
- Rinsing your piece after each dip is important, as the LOS will continue to act even once the piece has been removed from the solution.
- Drying your piece after rinsing is equally important. Re-dipping without drying will add cool water to the LOS solution and cause it to be more dilute and less effective.
- Do not place finished LOS pieces into the tumbler, as certain tumbling solutions may cause the LOS patina to bleed, contaminating the water and any other pieces in the tumbler.
- If you are not satisfied with the result, or have left your piece inadvertently in the LOS too long, it is possible to remove the patina entirely by either placing the piece in a kiln to a temperature of approximately 1100°F for a few minutes, or by firing your piece with a butane torch for a few seconds until the piece becomes white and the patina is gone. **CAUTION: do not fire glass or ceramics with a torch.**