

Jewelry - Liquids - Pickle, Neutralizer, Water, Ultrasonics

Introduction

There are a few chemicals in use in the jewelry area. Liquids, even water should be clearly labeled.

Notes

Safety

It is advisable to wear safety glasses when working with acids.

Common Hazards

Serious eye irritation .Acids will burn through clothing and irritate skin

The acids are heated, this will add to the effect of the acid. Flush skin with water immediately after contact.

Ultrasonic cleaner contains ammonia. Never mix it with other solutions. Damage to skin is minimal, but will dry and irritate.

Care

Use

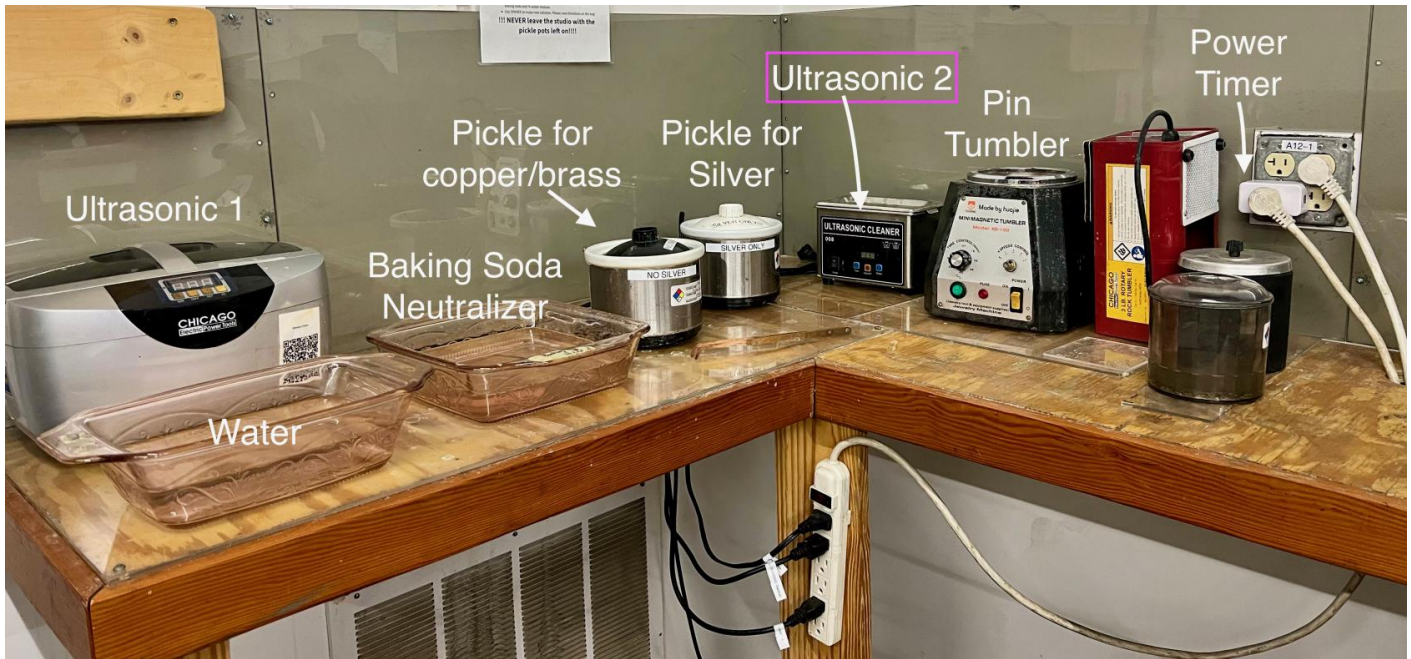
Consumables

Materials that can and can't be used.

Silver, copper, brass

Never use steel or ferrous metals in the jewelry area, especially not in the pickles.

The tools



Chicago electric ultrasonic

008 Ultrasonic

Non Silver Pickle

Silver Pickle

Neutralizer (Baking soda in water)

Water rinse

What the solutions are, how and when to replenish

Pickle (brand name Sparex, Sodium Bisulphate)

Setting Up - For 10oz warm water in the pickle pot, use up to 2 tablespoons of Sparex.

When mixing acids, always start with the most dilute solution first (water) then add the acid.

- **Dissolve:** Heat the pot to roughly 125° F to 150° F and stir with copper tongs until the granules are fully dissolved.
- **Usage:** Always use Copper Tongs to handle metal, as steel or iron will contaminate the bath.

The solution is depleted when it takes on a bright blue color and it no longer removes firescale.

Here is what you need to know about the blue color:

- **It means your pickle is working:** The color change indicates the acid is doing its job by removing surface oxidation. [[1](#), [2](#)]
- **It signals when to change the batch:** Fresh Sparex pickle is clear. As the liquid gets darker and turns deep blue-green, it is loaded with copper ions and its cleaning power is becoming depleted. [[1](#), [2](#), [3](#), [4](#)]
- **Watch out for "copper plating":** If you accidentally introduce a steel tool (like steel tweezers or binding wire) into a blue pickling bath, it causes a chemical reaction that forces the dissolved copper to plate right back onto your silver piece. Always use copper, plastic, or brass tongs. [[1](#), [2](#), [3](#)]

Using the Solution

Cleaning Up

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