

Colloidal Gold Lab Sheet (LVDC)

Wisdomsdoor.com

Date:

Batch #

Create Stock Solutions *(these can be reused for future):*

- Stock Solution NaCl: 1.5g NaCl in 500 mL distilled water (3 mg NaCl per 1 mL of solution).
- Stock Solution Sodium Citrate: 7.35g in 500 mL distilled water (15 mg per 1 mL solution).
- Corn Syrup: 30ml of Corn Syrup with 20mL distilled water, Put in eye dropper bottle.

500mL distilled water heated → 90°C.

Cathode Gold

Anode: gold | copper (preferred)

Power Supply → 24v to 38v.

8 drops of light corn syrup.

40 mL stock NaCl (Salt or Sea Salt, No Iodine).

10 mL stock Sodium Citrate.

Set Stirrer → 500 - 600 rpm.

| $sppm = scope\ ppm / mA = milliamp / mg = milligram /$ $ppm = parts\ per\ million / start-finish = weight\ of\ cathode$ | | | | | | | | | |
|--|-------------------------|--------------------------|---------|----|-----|-------|----|-------|---|
| | cathode start weight | cathode finish weight | minutes | mg | ppm | scope | mA | color | type |
| 1 | | | | | | | | | <input type="checkbox"/> 24k <input type="checkbox"/> 14k |
| 2 | | | | | | | | | <input type="checkbox"/> 24k <input type="checkbox"/> 14k |
| 3 | | | | | | | | | <input type="checkbox"/> 24k <input type="checkbox"/> 14k |
| 4 | | | | | | | | | <input type="checkbox"/> 24k <input type="checkbox"/> 14k |
| 5 | | | | | | | | | <input type="checkbox"/> 24k <input type="checkbox"/> 14k |
| 6 | | | | | | | | | <input type="checkbox"/> 24k <input type="checkbox"/> 14k |

Notes:

- 24k creates ruby red gold, 14k will create a grey/bluish gold.