Instructions for Colloidal Silver Production

1. Pour distilled water into a glass cup. Because your wire is extra long, it will accommodate a 16-oz. tumbler. (Do not use a metal or plastic cup and never use a styrene cup. Styrene cups will melt on to the silver electrodes.)

2. Add approximately one drop of Saline Solution for every 4 ounces of water. (See end of document for directions on making the Saline Solution.) If using any water other than distilled or reverse osmosis filtered water, do not add saline drops. Water normally has plenty of saline for conducting electrical current.

3. Insert your two .9999 ultra fine silver wires into water.

4. Plug the mini-jack end of alligator clips into generator. Briefly touch alligator clips together and watch how brightly the generator bulb flashes. This is a good way to check the strength of the batteries. When the bulb flashes only dimly, it indicates waning strength and time for fresh batteries. If your generator was built with the AC adapter option, be sure the adapter is not engaged when performing the battery check.

5. Attach alligator clips to silver wire ends extending over rim and outside of cup.

Do not let the alligator clips touch the water. Also, do not let the silver wires touch each other or the process will stop. The bulb will light up brightly if this happens. Crossed wires also put the maximum drain on your batteries, so be sure to separate them. If this becomes necessary, do not be alarmed. The direct current (DC) voltage of your generator is too low to cause sensation/shock. This is also true when engaging our AC to DC converter model.
**Process Will Begin.**

Do not be concerned if bulb glows dimly, or even not at all. The brightness of the bulb is dependent on the conductivity of the water, which is related to saline content and water temperature. In addition, the proximity of the silver electrodes to each other will also affect conductivity. If you move them closer together you will see the bulb glow brighter, or become dimmer as you move them farther apart. An ideal distance is 1 to 2 inches apart for good conductivity. Observe bubbles of hydrogen rise from one silver wire (the negative), while an ultra fine silver mist begins to peel off the other (positive) wire.

**Calculating concentration density.**

For each minute of activation within properly conductive water, a silver colloid of approximately 1 part per million (ppm) will be created at room temperature/72° F in an average sized glass.

- 8 ounces at 72° + 4 minutes activation = 5 ppm.
- 12 ounces at 72° + 6 minutes activation = 5 ppm.
- 16 ounces at 72° + 8 minutes activation = 5 ppm.

Five ppm is considered the baseline for a reliable working solution. Yield depends on water volume (size of glass), water conductivity (saline content and water temperature), proximity of electrodes to each other, surface area of electrodes (how much silver is in the water), amount of current, and time.

**Making High Concentrations**

To greatly increase the ppm, use heated water. For every 10° Celsius above room temperature (72° Fahrenheit) you will double your ppm. (We got this tip from the head chemist at an Environmental Protection Agency laboratory and have not
conducted our own filtration tests at this time to verify all high temperature calculations).

0° Celsius (freezing) equals 32° Fahrenheit. To convert Celsius to Fahrenheit, multiply Celsius degrees by 1.8 and add 32. For example, water boils at 100° Celsius and 212° Fahrenheit. Multiply 100 by 1.8 to get 180, and then add 32, which equals 212. For our purposes, we need to know only that 10° Celsius equals 18° Fahrenheit.

16 ounces at 90° Fahrenheit + 8 minutes activation = 10 ppm.

16 ounces at 108° Fahrenheit + 8 minutes activation = 20 ppm.

16 ounces at 126° Fahrenheit + 8 minutes activation = 40 ppm.

As more silver comes off of the positive electrode in heavier concentrations, you will also notice more and more oxidation forming on the same rod. Inevitably, some of this thick black oxidation will fall into the water as you remove your electrodes. This is not dangerous, but you can filter it out if you wish by using a paper coffee filter. (A white oxidation can form on the positive rod instead of black, depending on the type of water used and the trace elements it contains.)

A stainless steel pot or Corning ware is recommended for heating instead of a tea pot because of calcification. Use a clean container. We do not recommend using a microwave oven because microwaves are known to destroy the nutritional content of food and may have an adverse effect on water also. Fifteen minutes should be enough time for creating most concentrations desired. To speed up the process, use hot water to achieve higher concentrations. The same technique is recommended for making gallons of colloidal silver. Rather than running your generator for hours on end, make a concentrated sixteen ounce glass using hot water and then pour it into a gallon container of water and stir, allowing the colloidal silver to dilute to a lower concentration.
Candy thermometers work well for measuring water temperature. Hot water cools slowly, making extra efforts to keep the water temperature constant unnecessary.

To finish, detach alligator clips. Process will stop. Stir contents with plastic (non-conductive) utensil. Dry silver wires with paper towel or clean cloth. To remove dark oxide, polish the blackened (positive) wire with small nylon kitchen scouring pad. (These pads are commonly available in grocery stores). The negative silver wire should not require scouring. Each set (one foot) of silver electrodes should last about one year for one person.

**Silver Circulation In The Body**

Once ingested, colloidal silver circulates in the body for about a week before elimination. The silver ions enter the blood stream within seconds and appear to go anywhere the blood goes, even penetrating bone.

**Storage**

Silver is light sensitive. Keep in dark place at room temperature. Use darkly tinted glass bottles. Amber/brown glass provides the maximum shield against ultra violet light. Blue glass provides the least protection from UV of any color. If you have only clear glass bottles, simply wrap a paper bag around them and hold in place with tape.

Beware of plastic containers as plastic magnetizes easily, and can cause silver particles to stick to the sides of the container. If using colloidal silver in a plastic spray bottle, shake before spraying. In a pinch you could rinse out hydrogen peroxide bottles to store colloidal silver. Hydrogen peroxide bottles are made from non-reactive plastic so they are more resistant to building up electrical charges. We do not recommend even non-reactive plastic containers, however, because chemicals in plastics leach into the
colloid. If you compare the colloidal silver stored in glass to that stored in plastic, you'll notice a difference in the taste.

Do not refrigerate. As the colloid becomes colder the movement of the particles will slow down and fall out of solution. Always shake bottle before using to be sure that the silver colloid is evenly distributed. Do not store near speaker cabinets or other strong magnetic fields. Full potency can be retained for months when the silvery colored solution is properly stored. Potency may gradually diminish over longer periods of time though it can never be lost completely unless the silver ions are oxidized by light.

**Yellow Colloidal Silver**

A yellow colloidal silver can be made by using distilled water and no saline, or very little.

1. Pour hot water (approximately 150 degrees) into a 16-oz. glass.

2. Add only 1 drop of saline.

3. Run generator for 20 minutes.

Color will usually deepen after sitting for a number of hours. A yellow colored colloidal silver can also be made with your generator by using distilled water without any saline solution. For best results, use no more than eight ounces of hot water in a tall narrow glass to put as much silver in the water as possible. Process time will be around 45 minutes because of the reduced conductivity of the water. Keep an eye on your solution. If you forget about it and go to the movies you will end up with a highly concentrated brown sludge. I do not recommend ingesting high concentrations undiluted. If you do make a brown sludge you can put a small amount in a glass of water and stir. It should turn the water yellow, or, in higher concentrations, amber.

This yellow colored colloidal silver is the type that is normally sold
in stores because it is created with trace elements that are more water soluble, giving the appearance of longer shelf life because there is less settling. However, there appears to be no compelling evidence that the yellow colloid is more potent than the silver colored colloid. Color is always an effect of the trace elements that the silver ions temporarily attach themselves to. Depending on the type of water you use, you may make a yellow, green, or even blue colored colloid. While trace elements may come in a variety of sizes, they cannot change the size of the silver itself.

**How To Make A Pure Saline Solution**

1. Pour two ounces of distilled water into a separate glass container.

2. Add half a teaspoon of sea salt and stir until well dissolved.

3. Pour into an eye-dropper bottle.

4. Label the bottle "Saline Solution".

Do not use common table salt, as it has chemical additives. Avoid any salt containing iodide, not because iodide is bad, but because it is sticky, which means that anti-caking ingredients such as aluminum sulfate may be present as well. After you've made colloidal silver, add a few drops of the colloidal silver to your saline solution to stop fungus growth. Rock salt and Epsom salt are also good alternative candidates for a pure saline solution. (F.Y.I. Many people take calcium supplements but are unable to assimilate calcium because of low magnesium levels in the body. A teaspoon of Epsom salt/magnesium sulfate contains a lot of magnesium at an excellent price.)