Palladium Toner Kit for POP, Vandyke, and Kallitype

For warm tones

Your kit includes:
-100g Citric Acid -will make 10 liters of working solution.
-10ml Palladium Solution #3 (Sodium Chloropalladite) 10ml is equal to 255 drops.
-An empty one liter plastic container for storage

Other things you will want:
Sodium Thiosulfate aka “Hypo” crystals for fixer. 100-200g dissolved per liter of water to make a fixing bath.

Preparing the toning bath:

- Measure on 10g of Citric Acid and dissolve in one liter of room temperature distilled water. This makes a 1% solution of citric acid. To make larger or smaller quantities, use the basic ratio of 1g to 100ml water. Tap water may be ok in some situations, but alkalinity of hard water will buffer the citric acid somewhat.
- Add 7-15 drops of palladium solution #3. The more drops the faster your prints will tone. For some toning, slower speeds are desirable to allow adequate inspection time.
**Toning your paper**

After you develop your print, place it in a tray and quickly pour the toning bath evenly over the entire surface of the print. Once covered, begin to continuously agitate the tray, front to back and side to side.

Observe the subtle changes as the print tones. There is no substitute for visual inspection in toning, and this skill is developed through experience. The toner will begin to change both the color and density of the print, starting with the darker (shadow) areas where it is most difficult to see the toning action. Watch for changes in the lighter zones above the shadows, by the time you see this, the toning is well underway. Watch the toning action work its way up the “ladder” of the prints’ tonal scale, and stop when appropriate.

Rinse in fresh running water for 5 minutes to remove excess citric acid from the toner out of the paper.

Fix the print in 15% Sodium Thiosulfate (hypo) solution, 150 grams to one liter water. In practice, a 10-20% solution works fine, but start with 15%. Fix for 3 minutes with regular agitation. The fix will bleach out the excess silver and reveal your final toned image, which should be a little lighter than desired as your print will “dry down” extensively.

Wash prints thoroughly to remove fix. Use hypo clear or other products to shorten washing time and save water.

**Refreshing the toning bath**

After 10-25 prints you will begin to notice the toning bath slowing down. Refresh the bath with 5-10 additional drops of palladium #3. How long the toning bath lasts is heavily dependent on the prints you tone. The more shadow areas the faster the toner will be depleted.

**Storage of mixed toner**

Palladium toner can be stored for several weeks and does not have to be discarded after each session. Put the toner in a suitable container and store in a cool place away from direct sunlight. If long storage seems to have weakened the toner, you can refresh the bath with extra drops of Palladium #3 as above.