

How to Use Kodak Polytoner

By Thomas Gearty

General Notes

Kodak's Polytoner is mixture of brown toner and selenium toner. This versatile toner can give you a range of colors and tones, from cool to warm, in one bottle.

Brown toner is a polysulfide toner that replaces the silver metal in a print with a silver sulfide; if you just use brown toner, the result is a warm brown color. Selenium toner directly bonds selenium to the silver particles in a print; if you just use selenium toner, the result is more of a cool- or purple-brown color.

Because Polytoner contains both brown and selenium toner, its effect varies according to the dilution. In a weak solution (Polytoner mixed with a lot of water) the brown toner is more active, and you will get prints that are more brown in tone. In a more concentrated solution (Polytoner mixed with less water) the selenium toner is more active, and you will get prints with cool- and purple-browns.

Many toners, such as brown toner and selenium toner, give off fumes that are both disagreeable and toxic. To protect your health, always work in a well-ventilated area (or even outdoors!) or purchase a mask with the appropriate filters. And always wear rubber gloves or use tongs when working with toners.

Set Up

It's best to dedicate a set of trays only for toning, and to clean them thoroughly before and after use. Any chemical residue in the trays can cause staining or inconsistent results. To tone with Polytoner, you'll need 4 clean trays:

| Tray | Purpose | Contents |
|------|--------------|---|
| 1 | Pre-soak | Plain water Water bath for pre-soak |
| 2 | Toning bath | Polytoner mixed with water (see below for more on dilutions) |
| 3 | Rinse | Running water, if possible |
| 4 | Holding bath | Running water, if possible |

Procedure

Prints to be toned should be thoroughly fixed and washed. If a print is insufficiently processed, the emulsion may contain unexposed silver or fixer by-products that will react with the toner and form stains.

For more even toning and consistent results, soak prints in a tray of fresh water for a minute or two before toning.

Polytoner is always diluted with fresh water to make a working solution of toner. See below for recommended dilutions.

Because such a variety of colors are possible with Polytoner, the best way to use this toner is to tone by inspec-

tion. That is, soak a print in the toning bath until you see a color you like, pull the print from the toner and wash it. Then, place the print in a holding bath,

Because the toner itself is orange, it can be hard to see the true color of the print when it's soaking in the toning bath. It's okay to take the print out of the toning bath during toning and rinse it with water to check on the color. If you like the color, finish rinsing to stop the process. If you want more color, return it to the toning bath for additional time.

Place each print in a holding bath until you're toning session has ended. Then wash the prints for 20 to 30 minutes in running water. Dry the prints as you normally would.

It's preferable to have running water when toning, but not essential. If you do not have running water, make sure to change the water in the rinse tray every 10 to 15 minutes, and the water in the holding bath every 30 minutes or so. Trace amounts of toner in these baths can cause additional, unwanted toning to occur.

Dilutions

The degree of color change depends on the paper, the dilution of the toner and how long you soak the print in the toning solution. Polytoner has a more immediate and noticeable effect on warm-tone (chlorobromide) papers. Here are recommended dilutions to make 1 liter of working solution:

| Dilution | Add this much Polytoner | To this much water | Likely colors |
|-----------------|--------------------------------|---------------------------|----------------------|
| 1:4 | 200ml | 800ml | Cool brown/black |
| 1:25 | 40ml | 960ml | More neutral brown |
| 1:50 | 20ml | 980ml | Warmest brown |

It's best to have a few extra prints to test varying times in a given dilution. You can even cut a print in half and tone the two halves for different time, such as 2 minutes and 10 minutes, to see the range of colors possible.