



COPPER TONER

Read these instructions, and hints before starting. Keep safe

1litre Kit

MIXING

PART A Dissolve the powder in the pack labelled "PART A" in 500ml of cold tap water, then transfer the solution to a stock bottle and label.

PART B Dissolve the powders from the two inner packs of the pack labelled "PART B" together in 500ml of cold tap water, then transfer the solution to a stock bottle and label.

TONING

Fresh prints can be used straight from the final wash after fixing. Dried prints must be soaked in several changes of water before starting. When ready, AND NOT UNTIL THEN, mix equal portions of the two stock solutions in a print dish. Wash out the measuring vessels immediately.

Immerse the print. CONTINUOUS swirling action is vital until reaching the desired colour. Within a few seconds a "cold" tone is seen which improves poor contrast. A full blue colour takes about 5 minutes to form with freshly mixed toner. Stained highlights and print borders can occur if toning is carried on too long. Always use the same temperature and time for consistency between prints. Wash the print thoroughly, at least 5-10 minutes, and dry normally. In alkaline water areas, or if streaking occurs during washing or on drying, add a drop of any acid stop to the wash water. Do not exhibit in full sunlight.

Some colour variation is possible – Try adding more of :

PART A - Tendency to yellow.

PART B - Stronger colour.

WATER - Dilution slows colour formation. This is a very useful technique to control subtle hues.

Discard mixed toner after each session.

CAPACITY

Each litre of freshly mixed COPPER TONER processes at least the equivalent of 4 low key and up to 20 high key A4 prints. For precise consistency, use freshly mixed COPPER TONER for the first or more important prints. When toning slows, try an extra 10% longer per print. COPPER TONER is exhausted when the toning time takes twice that for freshly mixed toner, but it is still usable for experiments or to "cool" prints.

TROUBLE-SHOOTING

Most troubles arise from incomplete fixing, and the use of the wrong type of paper. Sometimes a 'matt' effect is seen with a coated paper which can only be prevented by using a different type or make of paper. It is usually due to excessive print density.

STORAGE

KEEP OUT OF THE REACH OF CHILDREN. NEVER RE-USE A FOOD CONTAINER. Use poisons bottles from a pharmacy or distinctive plastics. Unused stock solutions remain active for several weeks. Always run a test strip when using long-stored solutions before toning anything important. Store stock solutions in a cool place, in TOTAL DARKNESS, with loosened stoppers. Never mix the two parts until needed as they start to decompose on mixing and will not keep. Both solutions may deposit a sludge, but this does not need to be removed.

CAUTION

All chemicals are toxic if abused. Never eat, drink or smoke whilst using chemicals and avoid contact with the eyes. You are particularly advised to wear rubber gloves. In the case of accidental eye contact or ingestion, immediate first aid is to give plenty of water, and seek immediate medical attention, giving the following information :

PART A - Contains neutral ferricyanide.

PART B - Contains acid copper(II) salt .

Sluice everything down well afterwards. Respect the environment and dispose of empty vessels and spent solutions responsibly.

HINTS ON TONING by Jim Cottrill, APAGB © 1995

Jim is a noted authority and print Judge and has the best information.

The key to success is in the initial print, long before we get to grips with toning. A lousy print is still lousy and toning should never be looked upon as a panacea to get you out of that hole.... Toning will always catch out bad printing techniques, shown up as blotches, uneven areas, unexpected lines, and, worst of all, stained whites. These effects can be traced back to poor printing techniques, the most common being under/over exposure/development (snatching) and/or working the fixer to death.

GENERAL Always read the instructions and follow them carefully. Wear rubber gloves to prevent skin irritation. Never mix chemicals from one kit with another. The tone obtained with any toning process is not always predictable. Not all toners work with all papers. Be sure to run a test before attempting to tone any important prints.

Prints may be toned straight from the final wash after processing. Older prints should be pre-soaked in plain water for a few minutes before toning. Prints of unknown origin may benefit from first refixing in fresh fixer followed by thorough washing prior to toning.

PAPERS Most papers tone well, but best results are usually produced from fibre based papers. Tones vary considerably from one make of paper to another, indeed there can be variations between different batches of paper from the same manufacturer. Avoid the use of papers incorporating developing agents. Final tone quality is also dependent on the processing technique used for the original print. NOTE THE FOLLOWING :

DEVELOPING Always use fresh developer. Process the print at the specified temperature for the recommended time. Never under-develop the print or try to process more than the recommended amount of paper in the quantity of developer in use.

Avoid touching the print surface as far as possible to prevent any physical damage to the emulsion which may not show up until the print is toned.

FIXING Always use fresh fixer appropriate to the paper.

Fix at the specified temperature for the recommended time - extended fixing times can be a disadvantage. Do not allow prints to stack or overlap in the fixing bath as overlap lines can show in subsequent toning. Keep the prints moving during fixing. Never try to fix more than the recommended amount of paper in the quantity of fixer in use.

WASHING Thorough washing is essential. Any residual fixer left in a partially washed print can combine with the ferricyanide which is used in many bleaches for toners to produce Farmers Reducer. This will result in distorted tone and blotching. Always wash prints for the recommended times ensuring free movement of prints and regular changes of water. Extended washing can do no harm and can be beneficial.

DRYING Rapid drying of prints can produce uneven hardening of the emulsion particularly with contrasty prints. This will produce uneven or blotchy toning. If prints are dried flat, be sure to mop all water off the print surface with photographic blotting paper. Any puddles left could cause blotching when the print is toned.

MOUNTING Toned prints can be mounted by any of the usual means but more care is needed in the choice of suitable coloured mounting board.

SUMMARY Read all instructions and follow them carefully. Be consistent in your processing technique. Never use exhausted chemicals. If one make of paper does not yield the tone you want, try a different make. Always test new materials. **Have fun !**

So there you have it. Sound advice from the expert.

As a footnote, a curious phenomenon occurs sometimes. This manifests itself as blotches of a different hue, just like a foul disease, particularly when viewed at different angles. Expect this with some of the newer coated papers, when there can be a slight lifting of the waterproof coating, and variable access of the print developer. Light is reflected off the slightly different layers - just like oil on water effects, or Newton's rings.

If this occurs and you cannot switch paper types, the simplest cure is to tone to finality and allow the paper to soak until the gelatine has settled down, then squeegee flat and hope for the best when it dries. The merest dash of washing up liquid in the toning solutions is the final act of desperation .