

Rollo Pyro Instructions

The kit will make approximately 33 liters. Rollo pyro is meant only for rotary processing of sheet film. Not for tray processing.

Your kit contains:

1. 500 ml part "A"
2. 1000 ml part "B"
3. 75 gm sodium metaborate

Safety:

Pyro is a poison. It must be treated carefully. The greatest hazard is from the possibility of inhaling the dry powder if it becomes airborne. Once the chemical is mixed in a liquid solution, it is simply necessary to avoid full skin contact. Wear gloves for any operation likely to splash pyro solutions. Don't allow any spills to dry and turn into a powder that could get into the air as dust.

Rotary Processing with "Rollo Pyro"

We'll describe a typical processing sequence to run five sheets of 8X10 film in a Jobo Expert drum. Simply modify volumes to work with other rotary systems. Load your film into the tank.

- Mix 1.5 grams (1/2 teaspoon) of sodium metaborate into a liter of water. With the drum rotating on the processor, pour in half the metaborate solution and set a timer for five minutes.
- Measure out 15 ml of Rollo pyro solution A in a small graduate, 30 ml of solution B in a second graduate, and 1 liter of water in a large graduate. When the presoak has one minute remaining, pour the small quantities of A and B into the water and stir the solution, which has now been mixed at a ratio of 1:2:75.
- Dump the presoak, pour in the mixed developer and set the timer for the proper development time (remember to include "drain time").
- At the end of development dump the solution (be careful not to splash it around) and do two quick water rinses in a period of one minute. Don't use an acid stop.
- Pour in 350 ml of fresh rapid fixer without hardener. Don't reuse the fix, and don't use any hardener: acid hardener, or acid stop bath, will interfere with stain formation

and defeat the purpose of pyro development. Because pyro literally tans or hardens the gelatin emulsion, your negative will be sturdy without an acid hardener even if you normally find a hardening fixer mandatory with regular developers.

- After five minutes, discard the fixer and do two more water rinses.
- Add the second 500 ml of metaborate solution and run for two minutes. Most of the staining action actually occurs during this post-development staining treatment: do it carefully and consistently from one session to the next.
- Wash for twenty minutes. More stain develops during this somewhat prolonged wash. You can perform the wash in your rotary drum by changing the water every couple of minutes, or you can remove the films and place them in a tray with hand agitation, or in a vertical washer of the sort used to wash silver prints.
- Rinse the negatives in very dilute Photo-Flo and hang them up to dry.

In your first tests you may find that the film's antihation dyes have not been fully removed from the base side. To save these negatives, simply re-fix until they clear, then rinse and put them through another metaborate staining bath. They may take on a little less stain than the first time, but will still be fine negatives. To prevent this happening again, you will need to "wet load" your processing drum. We have not found this to be necessary with Expert Drums, but others have reported the problem. To wet load, put the drum in your sink and fill it with water and place a tray of water next to it. In the dark, remove your films one at a time from the holders or storage box, slip each one into the tray of water for several seconds to get it wet, then slide it into the water-filled drum. Repeat till you've filled the drum, put the lid on, turn on the lights, dump out the water, and proceed as described in the main instructions.

If you are using BTZS processing tubes or their homemade equivalent you'll need to do a slightly different trick to make sure the solutions properly reach the back of the films. Start the presoak step, and after a minute or so turn out the lights, open your tube and gently free the film from the smooth inside surface. Once the presoak has wetted the back of the film, the succeeding solutions will follow without difficulty. Thanks to Kerik Kouklis for this tip.