

Hypo Clear	25± 3	75± 5	2:00	?
Wash	25± 3	75± 5	5:00-10:00	n/a

This is important because bypassing the bleach will result in the retention of the silver image, which makes the film susceptible to degradation over time by the presence of residual fixer. Therefore, it is necessary to fully wash out the fixer as you would in any black and white process. This is not necessary if you use the bleach, as then there is no silver left to potentially degrade.

#### Notes

These instructions are given for the bucket method, which uses 7-9 liters of chemistry per step in 2 1/2 gallon plastic buckets, and stores the chemistry in 2 1/2 gallon plastic gas cans. Both these containers are inexpensive and readily available. For the color developer, use a 12-16 quart stainless steel stock pot (NOT aluminum: stainless steel!) that you use **ONLY FOR THIS** and **NEVER AGAIN COOK IN**, and have a hot plate (NOT the kitchen stove! NEVER bring this stuff into the kitchen, not matter how careful you are!) to heat it up. The method is very effective for lengths of 16mm film up to 150 feet or so, and if done carefully can produce a clean, virtually scratch-free result. If you're really serious, get ahold of a tank of nitrogen gas and purge the air out of any extra space in the container holding the developer, and you will prevent its oxidation and considerably extend its life.

Agitate by gently rotating the film mass around in a circle for the first 30 seconds, and the last 10 seconds of every subsequent 30 seconds.

Use gloves (the near elbow-length ones you can get at janitorial supply stores, not the cheap yellow ones) for all steps except as noted below. All the chemistry should be treated as if it was poisonous, and handled with great care. None of it should ever go down the sink (except the photoflo): take it to your local household hazardous waste disposal place -- just about every city in the US has one! Don't be lazy about this! Please!

#### Pre-bath and Rem-Jet removal

\*The first two steps here apply **ONLY** to film stocks that have a REM-Jet backing. REM-Jet is an opaque coating applied to the back of some film stocks to prevent halation, or exposure of the emulsion by light that passes through the emulsion layer and reflects back into the emulsion, reexposing it undesirably. This includes virtually all camera films (all that I know of), as well as the older color print stocks. The removal process works by first softening the REM-Jet in the prebath, then squeegeeing off (machines use a water knife, a stream of high-pressure water) the coating. It is very important to get it off in this step, because if you don't, it will never come off and will add streaks or outright opaqueness to your film. This has to happen in complete darkness, and presents something of a chore for the hand processor. The easiest method is to:

unspool the film into the water rinse, starting at one end and proceeding linearly along the length of the film. It works best if the water container is half full or less (a 2 1/2 gallon bucket is good). This is potentially slow, but it ensures that the film is not tangled, very important for the next step.

Transfer the film into the prebath, again starting at one end and proceeding along the length of the film.

Let it sit for at least a minute in the prebath.

Then, pull the film through two fingers so that they squeegee the REM-Jet off, starting at one end and continuing to the other, transferring it back into the water. The prebath is a solution of sodium sulfate, and does not seem particularly toxic or irritating; doing this well seems to require the use of bare hands. Feel free to try other squeegees instead, but beware scratching!

If you're nervous about there remaining any REM-Jet after this procedure, repeat the last three steps.