

PHOTOGRAPHERS' FORMULARY INC.

P.O. Box 950 • Condon MT 59826 • FAX 406-754-2896

TF-5 ARCHIVAL RAPID FIXER CONCENTRATE

CATALOG NO.	STOCK SOLUTION	WORKING SOLUTION
03-0200	1 liter	1 gallon
03-0201	1 gallon	4 gallons
03-0202	2 gallons	8 gallons
03-0203	4 gallons	16 gallons

GENERAL DESCRIPTION

TF-5 is a completely new archival rapid fixer with several features not available before:

- Processing time of only 30 seconds for resin-coated prints, 60 seconds for fiber-based prints, with no hypo clearing agent necessary.
- Little or no odor if mixed with distilled or filtered water.
- No stop bath necessary. Just use water rinse after developing.
- Non-hardening. Excellent for use with prints to be toned or re-touched.
- The only rapid-fixer system that allows the print to be completely fixed without impairing the rapidity of the wash.
- No image bleaching. All conventional fixers act as reducers. This means that the longer the material is left in the fixer, the more image silver is destroyed. This can only have bad effects on the image, whether it is a print or a negative. Conventional sodium thiosulfate (rapid) fixers suffer from this defect especially. The problem is eliminated in TF-5, which may offer slightly richer maximum blacks as a result.

CHEMICAL SAFETY

All chemicals are dangerous and must be treated with respect. Please read the warning labels on the package. Exercise care when handling, and avoid skin or eye contact.

Ammonium thiosulfate is the main ingredient in this proprietary formula. The user assumes all risk upon accepting these chemicals. **IF FOR ANY REASON YOU DO NOT WISH TO ASSUME ALL RISK, PLEASE RETURN THE CHEMICALS WITHIN THIRTY (30) DAYS FOR A FULL REFUND.** Please consult with local sewer and water authorities regarding proper disposal of darkroom chemicals in your area.

MIXING TF-5

USE DISTILLED WATER FOR BEST RESULTS

TF-5 is an already prepared liquid stock solution. To mix TF-5 working solution, the stock solution is mixed with three parts of water. For one gallon of working solution, take 1000 ml of TF-5 stock, and add 3000 ml of distilled water.

STORING TF-5

All photographic solutions should be used as soon as possible. TF-5 stock solution should not be kept for more than 12 months. All fixers should be kept away from high heat (over 85° F), as this will shorten the shelf life. If TF-5 is to be kept for some weeks after opening, it should be placed in smaller bottles filled to the top, with tight caps.

CAPACITY

The capacity of TF-5 is about 30 8x10 prints on fiber-based paper, 60 8x10 prints on resin coated paper, per liter of working solution. Some people are fixing many more sheets of paper than stated here. Do your own testing for your maximum capacity.

For film the capacity is 15-20 rolls of film per liter of working solution.

USING TF-5 ON PRINTS

- 1- Develop the print as usual.
- 2- Drain.
- 3- Rinse in running water at 68° F for 30 seconds, with continuous agitation. As an alternate, you may prefer to use an acid stop bath.
- 4- Drain.
- 5- Place the resin-coated print in the TF-5 fixer for 30 seconds, or fiber-base prints for 1 minute.
- 6- Drain and immediately place in a tray containing 68° F running water.
- 7- Wash fiber-based papers for at least 15 minutes - up to 25 minutes. Wash resin coated papers at least 3 minutes - up to 5.

Note: To establish proper washing times for your system we recommend testing processed emulsions with our Formulary Residual Hypo Test kit (cat. no. 03-0150). Since every darkroom has a different washing system (i.e. from hose in tray to archival print washer) our recommended wash times are approximate. Please test your system for wash times.

USING TF-5 ON T-MAX FILM:

Since T-MAX films have a built-in hardener and TF-5 has no hardener, they make a great combination. Ilford now says you do not need a hardening fixer with Pan F, FP-4, or HP-5.

- 1- Develop the film as usual.
- 2- Rinse with 68° F running water for 1 minute or use an acid stop bath.
- 3- Fix T-Max film for 6 minutes, with 5 inversions once a minute; or fix for 4 minutes with 30 seconds of agitation per minute. With other films, fix only 3 to 4 minutes.
- 4- Note: Most of the magenta stain should be removed from the film; the rest of the stain will be removed in the water wash.
- 5- Wash the film in 68° F running water for 5 minutes.

Note: Hypo clearing agent is not necessary but may be used. Do not use hypo eliminator.

- 6- Soak in a wetting agent such as Formaflo (catalog number 03-0195) for 15 seconds to one minute with agitation.
- 7- Hang the film to dry.

Please note: Many photographers happily slosh their hands in chemicals during printing. This should never be done, for two reasons - (a) all chemicals can enter the body through the skin, and all photographic chemicals are potentially dangerous to your health. Therefore, use tongs to handle prints, or good rubber gloves. If chemicals do get on your skin, wash it off immediately with plenty of soap and water; and (b) after handling the print, residual hypo may pass from the fingers to the negative that is being enlarged, possibly causing bleaching or stains, and ruining its permanence.

We carry storage bottles, rubber gloves, graduated cylinders, and beakers for your photo chemistry mixing needs. Consult your catalog or give us a call.



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