

Printing Color Films Developed as Black-and-White



DESCRIPTION

When Kodak color films have been mistakenly processed as black-and-white, there are several ways you can salvage pictures from them. You can obtain black-and-white prints from your films, or you can obtain color prints or color slides from them (except KODACHROME Films) by following the procedures described here.

These prints or slides would not be acceptable compared with those from color films which have been processed correctly. But the salvaged prints should certainly be of value especially when you can't take the pictures over again.

BLACK-AND-WHITE PRINTS

When Kodak color films are processed accidentally as black-and-white, they usually have an overall yellow or orange stain along with a black-and-white image. Use the following procedures to obtain black-and-white prints.

KODAK Color Negative Films. The stain in the negatives from these films is reddish orange and is similar to the overall reddish-orange color of negatives when the films are properly processed as color negatives. Therefore, you can make black-and-white prints from these films without giving the negatives special treatment. You can use fast papers like KODAK POLYMAX II RC Paper, but KODAK PANALURE SELECT RC Paper is better for this purpose.

PANALURE SELECT RC Paper is designed for making black-and white prints from color negatives. Exposures will be much shorter on PANALURE Paper than on conventional papers because of the reddish-orange stain in the negatives.

KODACHROME AND EKTACHROME Films, Process E-6. When KODACHROME Film is processed as black-and-white, the black rem-jet backing may not have been removed. To remove the rem-jet backing, swab the film with cotton dipped in a mild alkaline solution—a 5-percent solution of sodium carbonate will do the job. Be sure to keep this solution off the emulsion side of the film. Rinse the film to remove the sodium carbonate.

You can make prints on PANALURE Paper, but if you remove the yellow or orange stain from these misprocessed films, you can print the negatives on conventional black-and-white paper the same as you would any normal black-and-white negatives. *Do not remove the stain* from EKTACHROME Films if you plan to reprocess them as color negatives.

To remove the stain from KODACHROME and KODAK EKTACHROME Films:

1. Prepare the bleach bath by dissolving 1 ounce (28 g) of KODAK Citric Acid (Anhydrous) in 1 gallon (4 L) of KODAK Rapid Fixer diluted as recommended for films in the fixer instructions.
2. Handle only one negative at a time. Treat the negative in KODAK PHOTO-FLO Solution at 75-80°F (24-27°C) for 1 minute. Use fresh solution prepared as directed on the label.
3. Rinse in water at 75-80°F for 20 seconds.
4. Immerse in the bleach bath (prepared in step 1) at 75-80°F for 7-14 minutes.



Important

Stop bleaching if reduction of the silver image becomes apparent. It is better to leave a little stain than to lose the silver image.

5. Wash the negative thoroughly in running water at 75-80°F for 10 minutes.
6. Remove water droplets with a soft, viscose sponge, or treat the film with KODAK PHOTO-FLO Solution for 1 minute. Dry the negative.

Print the negative as you would any normal black-and-white negative.



Warning

Avoid unnecessary or prolonged skin contact with the bleach. Use rubber gloves. In case of accidental skin or eye contact, flush the affected area with plenty of water immediately. Contact with the liquid or the vapor can cause skin and eye irritation. Provide adequate ventilation. Keep tanks covered when you aren't using them.

COLOR PRINTS OR COLOR SLIDES

If you want color prints or color slides from your films (except KODACHROME Films), you can bleach and process the negatives to obtain color negatives. In many cases, this procedure will restore reasonable color images to the negatives so that color prints or slides can be made from them.

It's impossible to predict whether the color pictures you obtain will be acceptable. There is an infinite number of black-and white development and process conditions which would have a direct effect on the final results. However, the color prints or slides that have been salvaged with this emergency procedure should have more value than black-and-white prints from the same negatives.

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The procedures described here for salvaging pictures in color are not recommended for KODACHROME Films. Only black-and-white prints can be made from KODACHROME Films that have been misprocessed as black-and-white.

When you want color pictures from your films, **do not** use the procedures for removing stain described previously for making black-and-white prints.

Before you reprocess your negatives to obtain color, it's a good idea to make the best possible black-and-white prints for insurance. Because of the yellow or orange stain in the negatives, make your insurance prints on PANALURE Paper. Otherwise, the exposure time would be excessively long on conventional black-and-white papers.

To reprocess KODAK Color Negative and EKTACHROME Films, use the following procedure in normal room illumination:

1. Wash—15 minutes at 73–77°F (23–25°C).
2. Bleach in KODAK Bleach, Process E-6—6 minutes at 98–102°F (37–39°C); or in KODAK FLEXICOLOR Bleach, Process C-41—4 minutes at 98–102°F.
Note: The bleach *must* be free of hypo. If in doubt, use a fresh bleach solution.
3. Wash—15 minutes at 73–77°F.
4. Expose to the light from a No. 2 photoflood lamp at a distance of 1 foot (0.3 m) for 15 seconds on each side. Even though the preceding steps were done in room illumination, the exposure may have been uneven.



Warning

A lighted photoflood lamp becomes quite hot and will shatter if you allow any liquid to splash on its surface. Place sheets of glass where they will protect the lamp from spattering or splashing of the solutions or the wash water.

5. Process the film normally in KODAK FLEXICOLOR Chemicals, Process C-41.

Now that you have reprocessed your films as color negatives, you can make color prints on KODAK EKTACOLOR Edge 7 or ROYAL VII Paper, or black-and-white prints on PANALURE SELECT RC Paper; or color slides on KODAK VERICOLOR Slide Film.

MORE INFORMATION

Kodak has many publications to assist you with information on Kodak products, equipment, and materials.

Additional information is available on the Kodak website and through the U.S.A. /Canada faxback system.

The following publications are available from Kodak Customer Service, from dealers who sell Kodak products, or you can contact Kodak in your country for more information.

- G-26 *KODAK POLYMAX II RC Paper*
- G-27 *KODAK PANALURE SELECT RC Paper*
- J-83 *KODAK Chemicals, Process E-6*

For the latest version of technical support publications for KODAK Products, visit Kodak on-line at:
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