# KODAK VERICOLOR Films

#### INTRODUCTION

KODAK VERICOLOR Films are professional color negative still-camera films designed for rapid processing at approximately 100 F in a Kodak Versamat Color Processor, Model 145, with Kodak Vericolor Chemicals. The processing, transforming exposed film to dry Vericolor negatives, takes approximately ten minutes. Vericolor Films are not intended for processing in the equipment and chemicals used for Kodak Ektacolor Professional Films. Photographers who wish to process their own professional color negative film on a small scale should use Kodak Ektacolor Professional Films. Photographic finishers who have installed a processor such as the Kodak Versamat Color Processor, Model 145, offer photographers a rapid processing service for Kodak Versicolor Films. Kodak processing laboratories do not offer this service.

KODAK VERICOLOR Films are general-purpose color negative films, and are similar to Kodak Ektacolor Professional Films in many respects. The camera-room handling and exposure techniques for both families of films are the same. The quality of prints and transparencies produced from both families of color negatives is excellent. No supplementary masking procedures are necessary with either film. Vericolor negatives are designed to be printed on Kodak Ektacolor Papers, on Kodak Ektacolor Print and Slide Films, and on Kodak black-and-white papers currently used to print Ektacolor negatives.

There are two facts to keep in mind about Kodak Vericolor Films. First, they are designed to be processed as stated above and, second, the negatives should be kept separate from Ektacolor negatives for color analyzing and printing operations. Differences in dye characteristics between the two types of film contribute to filter-pack requirements that are generally not the same. Kodak Vericolor Films are readily distinguishable from Kodak Ektacolor Professional Films by distinctive product labels, code notches, and edge printing on the negatives. Information on negative identification is given on page 4.



#### DESCRIPTION OF THE FILMS

There are two kinds of Kodak Vericolor Films. Kodak Vericolor S Film is designed for short exposure times, 1/10 second or less, using daylight, electronic flash, or blue flashbulb illumination. Vericolor S Film is available in sheet or roll form. Consult the chart below for the sizes of film available. Note that the names of the three Vericolor S Films differ slightly due to the differences in the film base. With the exception of the 120- and 220-size roll film, the film support is Estar Base.

KODAK VERICOLOR L Film is designed for exposure times of 1/10 second to 60 seconds under tungsten (3200 K) lamps. This film is supplied in sheet form only in the sizes specified in the chart. The basic information on storage, handling, and exposing of KODAK VERICOLOR Films is printed in the instruction sheet packaged with the film.

#### KODAK VERICOLOR Films

Exposure Range	KODAK Film	Sizes Available	Speed*	Balanced For†	Processing
1/10 second or shorter (S)	VERICOLOR S 4105 (Estar Thick Base)	Sheets: 4 x 5 inches 5 x 7 inches	ASA 100	Daylight or Electronic Flash or Blue Flashbulbs	KODAK VERSAMAT Color Processor, Model 145; KODAK VERICOLOR Chemicals.
	VERICOLOR S 2105 (ESTAR Base)	Long Rolls: 35mm, 46mm, 70mm, 3½- inch widths			
	VERICOLOR S (6007)§	Rolls: 120 220			
1/10 second to 60 seconds (L)	VERICOLOR L 4106 (Estar Thick Bose)	Sheets: 4 x 5 inches 5 x 7 inches	ASA 100 1/10-second exposure ASA 64 5-second exposure ASA 32 60-second exposure	Tungsten (3200 K) Lamps	

<sup>\*</sup>The numbers listed are based on an ANSI Standard, and are for use with meters and cameras marked for "ASA" speeds.

Normally exposed Vericolor negatives have slightly lower red-filter density readings of selected areas than do corresponding areas of Ektacolor negatives. Depending somewhat on the nature of the subject and the use of a recommended light source for exposure, a normally exposed Vericolor negative read through a Kodak Wratten Filter, No. 92, or Status M red filter should have the approximate densities shown below.

REFERENCE AREA	NORMAL RED FILTER DENSITY
The Kodak Neutral Test Card (gray side) receiving the same illumination as the subject	0.70 to 0.90
The lightest step (darkest in negative) of a Kodak Paper Gray Scale receiving the same illumination as the subject	1.15 to 1.35
The highest diffuse density in a normally lighted forehead	1.10 to 1.30

Vericolor negatives can be retouched if desired. Both sides readily accept retouching with colored pencils or dyes.

Other light sources can be used with appropriate filtration. See the film instruction sheet.

<sup>§</sup>On ocetate base.

#### PROCESSING THE FILMS

The Kodak Versamat Color Processor, Model 145, is designed for processing Kodak Vericolor Films, using KODAK VERICOLOR Chemicals. It is not designed for the processing of Kodak Ektacolor Professional Films. This self-threading rollertransport processor accommodates both sheet and roll films up to 5 inches wide and up to 200 feet long. Kodak Vericolor Leader Tabs are used to transport all roll film and sheet film shorter than 4 inches through the processor. The film travels at the rate of 3 feet per minute. Exact solution temperatures are maintained by thermostatically controlled tank heaters and tempered-water heat exchangers. Precise replenishment metering, recirculation, and filtering of all solutions make possible the highest degree of uniformity with the most economical use of processing solutions.



The Kodak chemicals designed for the processing of Kodak Vericolor Films in the Kodak Versamat Color Processor, Model 145, are as follows:

KODAK VERICOLOR Hardener and Replenisher KODAK VERICOLOR Neutralizer and Replenisher KODAK VERICOLOR Developer Replenisher KODAK VERICOLOR Developer Starter
KODAK VERICOLOR Stop-Fix and Replenisher
KODAK VERICOLOR Bleach and Replenisher

KODAK Color Film Liquid Fixer and Replenisher

The process is monitored with Kodak Vericolor Control Strips, following the procedure given in the manual supplied with the Kodak Versamat Color Processor, Model 145.

Silver recovery from the fixer solutions is recommended. A Kodak Chemical Recovery Cartridge, Type 1-P is used for recovering silver from the stop-fix solution and fixer solution overflows.

Complete information on processing Kodak Vericolor Film is in the manual supplied with the Kodak Versamat Color Processor, Model 145.

## PRINTING VERICOLOR NEGATIVES

Color prints can be made by direct contact-printing or enlargement onto Kodak Ektacolor Papers, or by the Kodak Dye Transfer Process.

Color transparencies can be made by exposing directly onto Kodak Ektacolor Print Film 4109 (Estar Thick Base). Kodak Ektacolor Slide Film 5028 is used when making 35mm transparencies. Black-and-white prints can be made on Kodak Panalure Paper or on Kodak Panalure Portrait Paper.

Because Vericolor negatives have slightly different printing characteristics from Ektacolor negatives, a standard Vericolor negative should be made by the customer (the Eastman Kodak

Company does not supply one). A standard Vericolor negative is one that has been properly exposed and processed under known conditions and has, from actual trial printing, made an excellent print. This standard negative, with an accurate record of the filter pack required for a particular paper emulsion, is used to determine printing filter packs for other Vericolor negatives.

Printing can be done using direct-contact or enlarging equipment with or without spot monitoring. Automatic color printers such as Kodak S-type printers are recommended. These printers can be used in conjunction with Kodak Video Color Negative Analyzers. Kodak Publication Part No. 639833, Setup Procedure for Printing KODAK VERICOLOR Films on Kodak S-Type Printers with KODAK Video Color Negative Analyzers, is available from Department 412-L, Eastman Kodak Company, Rochester, New York 14650.

### **NEGATIVE IDENTIFICATION**

Vericolor negatives in sheet form are readily identified by their code notches in the upper right hand corner.



## **VERICOLOR** Type L

Vericolor negatives in 120- and 220-size rolls and in long lengths have edge printings as follows:

FILM	SIZE	IDENTIFICATION		
KODAK VERICOLOR S Film (6007) (acetate base)	120 and 220 rolls	Blue edge printing: "Kodak Safety Film" repeated at 1 3/4 inch intervals. Emulsion number "07XXX" printed once per film length.		
	35mm rolls (Spec. No. 404)	Blue edge printing: "Kodak Safety Film—Vericolor S Film repeated at 6-inch intervals. Emulsion number "05XXX and frame numbers 1 to 44 repeated at 33-inch intervals		
KODAK VERICOLOR S Film 2105 (Estar Base)	35mm rolls (Spec. No. 414, 426) and 3 1/2- inch rolls	Neutral-color edge printing: "Kodak Vericolor Safety Film" repeated at 4-inch intervals on the 35mm rolls and at 2-inch intervals on the 31/2-inch rolls.		
	46mm rolls	Blue edge printing: "Kodak Safety Film" and emulsion number "05XXX" repeated at 1 3/4-inch intervals.		
	70mm rolls	Neutral-color edge printing: "Kodak Vericolor Safety Film" repeated at 12-inch intervals. "2105" is repeated at 4-inch intervals on opposite edge.		

Follow this simple and effective way to identify positively KODAK VERICOLOR Films on ESTAR Base. Place two 2 1/4 x 3-inch pieces of polarizing filters together and hold them in front of an illuminator. Rotate one of the filters until minimum light is transmitted. Keeping the polarizing filters in this fixed position, insert a color negative between the two filters, and rotate it slightly. If the negative image becomes visible, the film is one of the Vericolor Films on ESTAR Base. If you cannot see the image, the film can be a KODAK EKTACOLOR Professional Film, KODACOLOR-X Film, or KODAK VERICOLOR S Film (6007); these films are on acetate base.

Professional, Commercial, and Industrial Markets Division

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