KODAK VERICOLOR III Professional Film

DESCRIPTION

KODAK VERICOLOR III Professional Film is a medium-speed color negative film. Its speed, sharpness, and grain make it an excellent choice for portraiture and wedding photography. It is available in many roll and sheet sizes on a variety of bases.

This film is designed for exposure with daylight or electronic flash at exposure times of 1/10,000 second to 1/10 second.

Process VERICOLOR III Professional Film in KODAK FLEXICOLOR Chemicals for Process C-41. Processed negatives have excellent dark-keeping stability.

FEATURES	BENEFITS
• Excellent flesh-to-neutral color reproduction	• Accurately records neutrals while maintaining pleasing flesh tones
• Precisely controlled curve shape with a long straight-line portion	• Good exposure latitude with excellent neutral-scale reproduction
• Moderate contrast and color saturation	• Excellent color reproduction
• Designed for processing in KODAK FLEXICOLOR Chemicals for Process C-41	• Can be processed with KODAK EKTAPRESS Professional Films, KODAK Pro Films, and KODAK GOLD Films
• Not subject to leuco-cyan-dye formation	• Less susceptible to improper bleaching
• Dye-masking color couplers	• Quality color reproduction without supplementary masking

DARKROOM RECOMMENDATIONS

Do not use a safelight. Handle unprocessed film in total darkness.

STORAGE AND HANDLING

Load and unload film in standard short-roll sizes (135, 120, and 220) in subdued light; for long rolls, see the specifications under “Sizes Available.”

Store unexposed film in a refrigerator at 55˚F (13˚C) or lower in the *original sealed package.* To avoid moisture condensation on film that has been refrigerated, allow the film to warm up to room temperature before opening the package.

Process film as soon as possible after exposure. Protect negatives from strong light, and store them in a cool, dry place. For more information on storing negatives, see KODAK Publication No. E-30, *Storage and Care of KODAK Films and Papers—Before and After Processing.*

EXPOSURE

Film Speed

Use the speed numbers in the table below with cameras or meters marked for ISO, ASA, or DIN speeds or exposure indexes. Do not change the film-speed setting when metering through a filter. Metering through filters may affect light meter accuracy; see your meter or camera manual for specific information. For critical work, make a series of test exposures.

Light Source	KODAK WRATTEN Gelatin Filter*	ISO Speed
Daylight or Electronic Flash	None	160/23˚
Photolamp (3400 K)	No. 80B	50/18˚
Tungsten (3200 K)	No. 80A	40/17˚

* For best results without special printing.

Note: The nominal speed of VERICOLOR III Professional Film is ISO 160; many photographers prefer to expose it at EI 125.

Because VERICOLOR III Professional Film is designed for fine portraiture, it combines a “soft toe,” moderate contrast, and moderate color saturation. For fine portraiture, these characteristics maximize the retention of highlight and shadow detail, with exceptional flesh-tone reproduction under controlled lighting. However, because of the film’s “soft toe” and moderate contrast, photographers (under many circumstances) prefer to “build” slightly higher contrast and color by exposing the film at EI 125. This also provides additional protection from potential underexposure.

Daylight

Use the exposures in the table below for average frontlit subjects from 2 hours after sunrise to 2 hours before sunset.

Lighting Conditions	Shutter Speed (second)	Lens Opening
Bright or Hazy Sun on Light Sand or Snow	1/250	*f*/16
Bright or Hazy Sun (Distinct Shadows)	1/250	*f*/11*
Weak, Hazy Sun (Soft Shadows)	1/250	*f*/8
Cloudy Bright (No Shadows)	1/250	*f*/5.6
Heavy Overcast or Open Shade†	1/250	*f*/4

* Use *f*/5.6 for backlit close-up subjects.
† Subject shaded from the sun but lighted by a large area of clear sky.

Electronic Flash

Use the appropriate guide number in the following table as a starting point for your equipment. Select the output closest to the number given by your flash manufacturer. Then find the guide number for feet or metres. To determine the lens opening, divide the guide number by the flash-to-subject distance. If negatives are consistently too dense (overexposed), use a higher guide number, if they're too thin (underexposed), use a lower number.

Unit Output (BCPS)*	Guide Number Distance in Feet/Metres
350	55/17
500	65/20
700	75/22
1000	90/27
1400	110/33
2000	130/40
2800	150/46
4000	180/55
5600	210/65
8000	250/75

* BCPS = beam candlepower seconds

Fluorescent and High-Intensity Discharge Lamps

Use the color-compensating filters and exposure adjustments in the tables below as starting points to expose this film under fluorescent or high-intensity discharge lamps. For critical applications, make a series of test exposures under your actual conditions.

To avoid the brightness and color variations that occur during a single alternating-current cycle, use exposure times of 1/60 second or longer with fluorescent lamps; with high-intensity discharge lamps, use exposure times of 1/125 second or longer.

Type of Fluorescent Lamp	KODAK Color Compensating Filters	Exposure Adjustment
Daylight	40R	+⅔ stop
White	20C + 30M	+1 stop
Warm White	40B	+1 stop
Warm White Deluxe	30B + 30C	+1⅓ stops
Cool White	30M	+⅔ stop
Cool White Deluxe	20C + 10M	+⅔ stop

Note: When you don't know the type of fluorescent lamps, try a 10C + 20M filter combination and increase exposure by ⅔ stop; color rendition will probably be less than optimum.

Type of High-Intensity Discharge Lamp	KODAK Color Compensating Filters	Exposure Adjustment
General Electric Lucalox*	70B + 50C	+3 stops
General Electric Multi-Vapor	10R + 20M	+⅔ stop
Deluxe White Mercury	20R + 20M	+⅔ stop
Clear Mercury	80R	+1 ⅔ stops

* This is a high-pressure sodium-vapor lamp. The information in the table may not apply to other manufacturers' high-pressure sodium-vapor lamps because of differences in spectral characteristics.

Note: Some primary color filters were used in the tables above to reduce the number of filters and/or to keep the exposure adjustment to a minimum. Red filters were substituted for equivalent filtration in magenta and yellow. Blue filters were substituted for equivalent filtration in cyan and magenta.

Adjustments for Long and Short Exposures

No filter correction or exposure compensation is required for exposures from 1/10,000 second to 1/10 second.

PROCESSING

Process VERICOLOR III Professional Film in KODAK FLEXICOLOR Chemicals for Process C-41. For more information on processing this film, see KODAK Publication No. Z-131, *Using KODAK FLEXICOLOR Chemicals.*

JUDGING NEGATIVE EXPOSURE

Expose VERICOLOR III Professional Film properly for best results.

You can check the exposure level with a suitable electronic densitometer equipped with a filter such as a KODAK WRATTEN Gelatin Filter No. 92 or the red filter for Status M densitometry. Depending on the subject and the light source used for exposure, a normally exposed color negative measured through the red filter should have the approximate densities listed below. These densities apply for recommended light sources and assume correct processing of the negative.

Area Measured	Density Reading
The KODAK Gray Card, KODAK Publication No. R-27 (gray side) receiving the same illumination as the subject	0.73 to 0.93
The lightest step (darkest in negative) of a *KODAK Paper Gray Scale* receiving the same illumination as the subject	1.25 to 1.45
The highest diffuse density on a normally lighted forehead —light complexion —dark complexion	 1.05 to 1.35 0.75 to 1.15

Because of the extreme range in skin color, use the red density values given for a normally lighted forehead only as a guide. For best results, use a *KODAK Gray Card* (gray side).

PRINTING NEGATIVES

You can make color prints by direct contact printing or enlarging on KODAK EKTACOLOR PORTRA III, EKTACOLOR SUPRA II, or EKTACOLOR ULTRA II Paper or KODAK DURAFLEX® RA Print Material for Process RA-4.

Make color transparencies or slides by direct exposure onto KODAK VERICOLOR Print Film or KODAK VERICOLOR Slide Film. Make display transparencies on KODAK DURATRANS® RA or DURACLEAR™ RA Display Material.

Make black-and-white prints on KODAK PANALURE SELECT RC Paper; for short-term applications, use KODAK EKTAMAX Professional Paper for Process RA-4.

RETOUCHING

The 120, 220, sheet and 70 mm (on 4-mil base) sizes of VERICOLOR III Film have a retouching surface on the base side and the emulsion side. You can retouch 5026 film only on the emulsion side.

For more information on retouching negatives, see KODAK Publication No. E-71, *Retouching Color Negatives.*

IMAGE STRUCTURE

Print Grain Index

The Print Grain Index number refers to a method of defining graininess in a print made with diffuse-printing illumination. It replaces rms granularity and has a different scale which cannot be compared to rms granularity.

- The method uses a uniform perceptual scale, with a change of four units equaling a *just noticeable difference* in graininess for 90 percent of observers.
- A Print Grain Index rating of 25 on the scale represents the approximate visual threshold for graininess. A higher number indicates an increase in the amount of graininess observed.
- The standardized inspection (print-to-viewer) distance for all print sizes is 14 inches, the typical viewing distance for a 4 x 6-inch print.
- In practice, larger prints will likely be viewed from distances greater than 14 inches, which reduces apparent graininess.
- Print Grain Index numbers may not represent graininess observed from more specular printing illuminants, such as condenser enlargers.

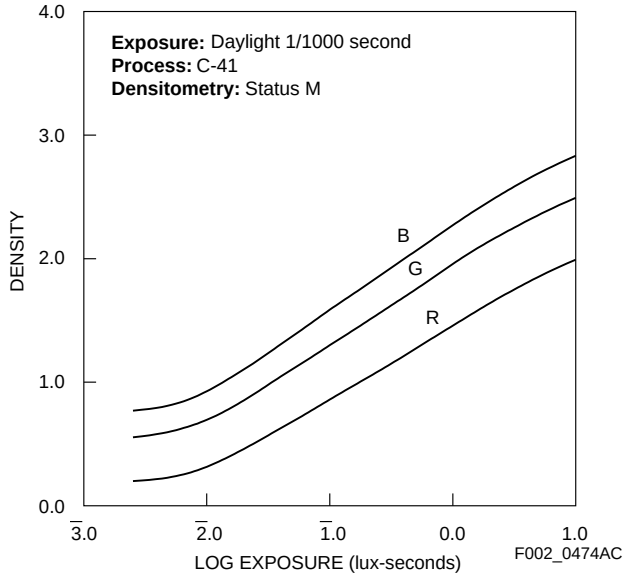
Print Size (inches)	4 x 6	8 x 10	16 x 20
Magnification	4.4X	8.8X	17.8X
Negative Size	**Print Grain Index No.**		
24 x 36 mm (Size 135)	39	61	91

Print Size (inches)	4 x 6	8 x 10	16 x 20
Magnification	2.6X	4.4X	8.8X
Negative Size	**Print Grain Index No.**		
6 x 6 cm (Size 120/220)	27	39	61

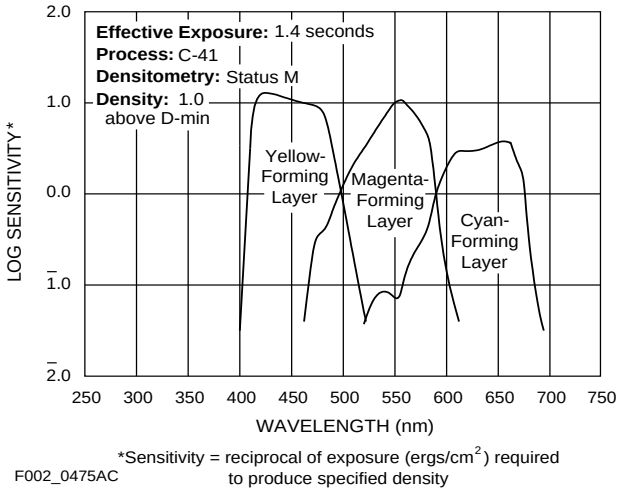
Print Size (inches)	4 x 6	8 x 10	16 x 20
Magnification	1.2X	2.1X	4.2X
Negative Size	**Print Grain Index No.**		
4 x 5 inches (Sheets)	Less than 25	Less than 25	38

CURVES

Characteristic Curves



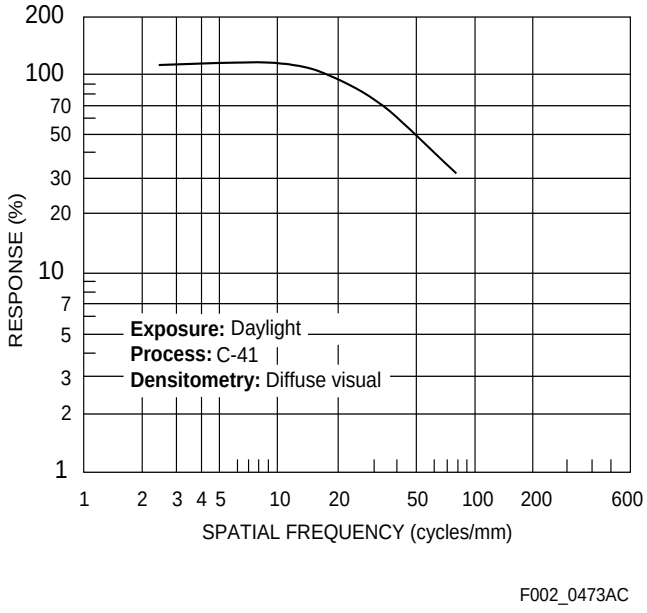
Spectral-Sensitivity Curves



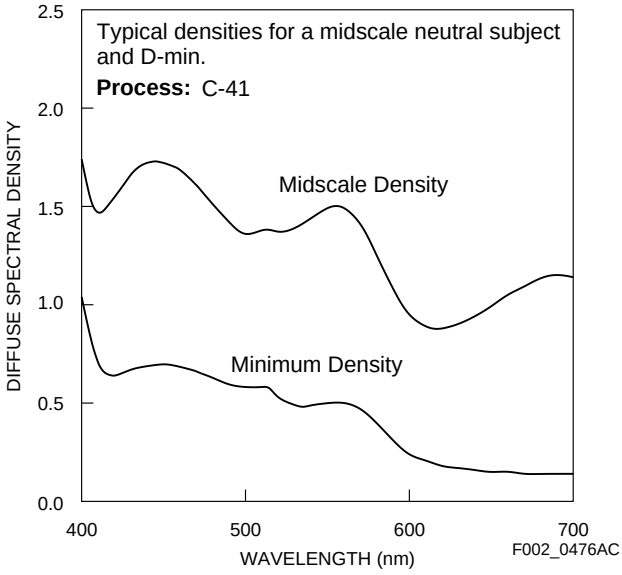
*Sensitivity = reciprocal of exposure (ergs/cm^2) required to produce specified density

Note: The characteristic curves for KODAK VERICOLOR III Professional Film / 2106 and 4106 are 0.04 lower in overall density than these curves, which apply to 5026 and 6006 Film.

Modulation-Transfer Curve



Spectral-Dye-Density Curves



NOTICE: The sensitometric curves and data in this publication represent product tested under the conditions of exposure and processing specified. They are representative of production coatings, and therefore do not apply directly to a particular box or roll of photographic material. They do not represent standards or specifications that must be met by Eastman Kodak Company. The company reserves the right to change and improve product characteristics at any time.

SIZES AVAILABLE

Sizes and CAT numbers may differ from country to country. See your dealer who supplies KODAK PROFESSIONAL Products.

KODAK VERICOLOR III Professional Film

Rolls	Code	Base	CAT No.
135-36 (pro-pack of 5 rolls)	5026	5-mil acetate	102 7846
135-36 Press-Pack 50 (6 cartons of 50 rolls each)	5026	5-mil acetate	155 3296
120	6006	3.6-mil acetate	151 1013
120 (pro-pack of 5 rolls)	6006	3.6-mil acetate	852 7343
220 (pro-pack of 5 rolls)	6006	3.6-mil acetate	852 1130

Long Rolls	Code	Sp No.	CAT No.
35 mm x 100-ft, unperf	5026	414	858 4443
35 mm x 100-ft, unperf	5026	426W	133 0158
35 mm x 200-ft, unperf	5026	427W	152 1004
35 mm x 100-ft, perf	5026	404	884 5976
35 mm x 100-ft, perf	5026	653	152 0923
46 mm x 100-ft, unperf	5026	819	193 4249
46 mm x 200-ft, unperf	5026	819	152 2879
70 mm x 100-ft, unperf	2106	473	180 8377
70 mm x 100-ft, unperf	2106	474	152 1855
70 mm x 15-ft, perf	5026	488	147 1416
70 mm x 100-ft, perf	2106	475	891 6371
70 mm x 100-ft, perf	2106	477	152 1061
9½ inch x 125 ft		952	143 5700

Sheets	Size (Inches)	Code 	Base	CAT No.
10	4 x 5	4106	7-mil ESTAR	142 6790
50	4 x 5	4106	7-mil ESTAR	142 6048
50	5 x 7	4106	7-mil ESTAR	142 6063
10	8 x 10	4106	7-mil ESTAR	142 6121

Specification Numbers

No. 404—35 mm, darkroom load, KS perforated both edges, on 2-inch OD plastic core with 1-inch center hole with keyway (Type U). Frame numbered, wound emulsion in.

No. 414—35 mm, unperforated, wound emulsion in on S-83 No. 10 metal spool. Subdued-light load (acetate base).

No. 426W—35 mm, 100-foot length, darkroom load, unperforated, on 1-inch OD plastic core, 0.320-in. square center hole with keyway (Type AA). For Beattie Portronic and Alves copying cameras.

No. 427W—Same as No. 426W, except in 200-foot length.

No. 473—70 mm, darkroom load, unperforated, on 1¼-inch OD plastic core with 0.324-in. square center hole (Type J). For Beattie Portronic, MacVan R-70, and similar cameras.

No. 474—70 mm, subdued-light load, unperforated, on S-84 No. 10 metal spool.

No. 475—70 mm, darkroom load (ESTAR Base), subdued-light load (acetate base). Perforated Type II (both edges), on S-84 No. 10 metal spool. For cameras equipped with Type II sprockets, such as Graphic 70, Linhof Cine, and Rollex 70 Cameras.

No. 477—70 mm, subdued-light load, perforated Type I (both edges), on S-84 No. 10 metal spool. For Hulcher and similar cameras.

No. 488—70 mm, daylight load, perforated Type II (both edges). For Graphic 70, Linhof Cine, Rollex 70, and similar Cameras.

No. 653—35 mm, subdued-light load, KS perforated (both edges), on S-83 No. 10 metal spool.

No. 819—46 mm, unperforated, on 1-inch OD plastic core with ¼-inch center hole with keyway (Type C).

No. 952—9½-inch, unperforated, on S-46 spool.

MORE INFORMATION

Kodak has many publications to assist you with information on Kodak products, equipment, and materials. The following publications are available from dealers who sell Kodak products, or you can order them directly from Kodak through the order form in KODAK Publication No. L-1, *KODAK Index to Photographic Information*. To obtain a copy of L-1, send your request with $1 to Eastman Kodak Company, Department 412-L, Rochester, New York 14650-0532.

E-24	*KODAK VERICOLOR Slide and Print Films*
E-30	*Storage and Care of KODAK Films and Papers—Before and After Processing*
E-58	*Print Grain Index—An Assessment of Print Graininess from Color Negative Films*
E-71	*Retouching Color Negatives*
E-140	*KODAK EKTACOLOR PORTRA III Paper*
E-141	*KODAK EKTACOLOR SUPRA II Papers*
E-142	*KODAK EKTACOLOR ULTRA II Paper*
E-143	*KODAK Display and Print Materials for Process RA-4*
Z-131	*Using KODAK FLEXICOLOR Chemicals*

Kodak Information Center's Faxback System

—Available 24 hours a day, 7 days a week—

Many technical support publications for Kodak products can be sent to your **fax** machine from the Kodak Information Center. Call:

U.S.A.1-800-242-2424, Ext. 33
Canada 1-800-295-5531

If you have questions about Kodak products, call Kodak.

In the U.S.A.:
1-800-242-2424, extension 19, Monday–Friday
9 a.m.–7 p.m. (Eastern time)

In Canada:
1-800-465-6325, Monday–Friday
8 a.m.–5 p.m. (Eastern time)

Or contact Kodak on-line at:
http://www.kodak.com/go/professional

Note: The Kodak materials described in this publication for use with KODAK VERICOLOR III Professional Film are available from dealers who supply Kodak professional products. You can use other materials, but you may not obtain similar results.

Kodak Professional Division
EASTMAN KODAK COMPANY

Kodak Professional

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