FILM
INFORMATION FROM KODAK

KODAK EKTACHROME 100X Professional Film

This new color reversal film is ideal for outdoor photojournalism, and for advertising and illustration applications. It is an excellent choice for lighting conditions ranging from open shade or overcast to bright sunlight.

This film features high color saturation, a warm color balance, and very pleasing flesh tones. It has very fine grain, very high sharpness, and high resolving power. It is designed for exposure with daylight or electronic flash at times from 1/10,000 to 1/10 second with no filter or exposure adjustment. You can use exposure times up to 1 second with an exposure increase and a color compensating filter. You can also expose this film with photolamps (3400 K) or tungsten (3200 K) illumination with conversion filters.

Use this film to produce color transparencies for viewing with 5000 K illumination (ANSI Standard PH2.30-1989, *Viewing Conditions—Photographic Prints, Transparencies, and Photomechanical Reproductions*). You can also use the transparencies for printing by photomechanical methods, by photographic methods of direct duplication and direct reversal printing, and by the dye-transfer process.

FEATURES	BENEFITS
• High color saturation, warm color balance	• Excellent for outdoor photography under a wide range of lighting conditions
• Excellent color rendition	• Pleasing flesh tones combined with enhanced colors
• Processed in Process E-6 chemicals	• Can be processed with other films for Process E-6

SIZES AVAILABLE

Rolls	Film Code	Base	CAT No.
135-36	EPZ / 5024	5-mil acetate	845 2112
135-36 (pro-pack of 5 rolls)	EPZ / 5024	5-mil acetate	825 7552
135-36 (Press-Pac of 50 rolls)	EPZ / 5024	5-mil acetate	175 8598
120	EPZ / 6024	3.6-mil acetate	169 6004
120 (pro-pack of 5 rolls)	EPZ / 6024	3.6-mil acetate	818 2065

Sheets	Size (Inches)	Film Code [redacted]	Base	CAT No.
10	4 x 5	7024	8.2-mil acetate	811 5289
50	4 x 5	7024	8.2-mil acetate	806 1970

DARKROOM RECOMMENDATIONS

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

STORAGE AND HANDLING

Load and unload roll film in subdued light.

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.

Store exposed film in a cool, dry place. Process film as soon as possible after exposure. Protect processed film from strong light, and store it in a cool, dry place. For more information about storing transparencies, see KODAK Publication No. E-30, *Storage and Care of KODAK Films and Papers*.

EXPOSURE

Use these speed numbers with meters and cameras marked for ISO, ASA, or DIN speeds or exposure indexes. For critical work, make a series of test exposures.

Light Source	KODAK WRATTEN Gelatin Filter	ISO Speed
Daylight or Electronic Flash	None	100/21°
Photolamp (3400 K)	No. 80B	32/16°
Tungsten (3200 K)	No. 80A	25/15°

Daylight

Use the exposures in the table below for average frontlighted 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	1/125	*f*/22
Bright or Hazy Sun (Distinct Shadows)	1/125	*f*/16*
Weak, Hazy Sun (Soft Shadows)	1/125	*f*/11
Cloudy Bright (No Shadows)	1/125	*f*/8
Heavy Overcast or Open Shade†	1/125	*f*/5.6

*Use *f*/8 at 1/125 second for backlighted 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 table below 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 find the lens opening, divide the guide number by the flash-to-subject distance.

Unit Output (BCPS)*	Guide Number	
	For Distances in Feet	For Distances in Metres
350	40	12
500	50	15
700	60	18
1000	70	21
1400	85	26
2000	100	30
2800	120	36
4000	140	42
5600	170	50
8000	200	60

*BCPS = beam candlepower seconds.

Multiple Exposures with Electronic Flash: To compensate for the effects of multiple consecutive exposures, use the following filter and exposure adjustments as starting points.

Number of Flashes	KODAK Color Compensating Filter	Exposure Adjustment
1	None	None
2	None	None
4	None	+ ⅓ stop
8	05M	+ ½ stop
16	05M	+ ⅔ stop

Fluorescent and High-Intensity Discharge Lamps

Use the color-compensating filters and exposure adjustments in the following tables 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. Vary the recommended filtration by at least ±CC10, and increase or decrease exposure accordingly.

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 or longer.

Type of Fluorescent Lamp	KODAK Color Compensating Filters	Exposure Adjustment
Daylight	50R	+ 1 stop
White	40M	+ ⅔ stop
Warm White	20C + 40M	+ 1 stop
Warm White Deluxe	30B + 30C	+ 1⅓ stops
Cool White	40M + 10Y	+ 1 stop
Cool White Deluxe	20C + 10M	+ ⅔ stop

Note: When you don't know the type of fluorescent lamps, try a 30M filter 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*	80B + 20C	+ 2⅓ stops
General Electric Multi-Vapor	20R + 20M	+ ⅔ stop
Deluxe White Mercury	30R + 30M	+ 1⅓ stops
Clear Mercury	70R	+ 1⅓ 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 adjustment is required for exposure times from 1/10,000 to 1/10 second. At 1 second, use a CC05R filter and increase exposure by ½ stop. We do not recommend using exposure times longer than 1 second.

Note: This information applies only when the film is exposed to daylight. The data are based on average emulsions rounded to the nearest ½ stop and assume normal recommended processing. Use the data only as a guide. The adjustments are subject to change due to normal manufacturing variations or film-storage conditions after the film leaves the factory. For critical applications, make tests under your conditions.

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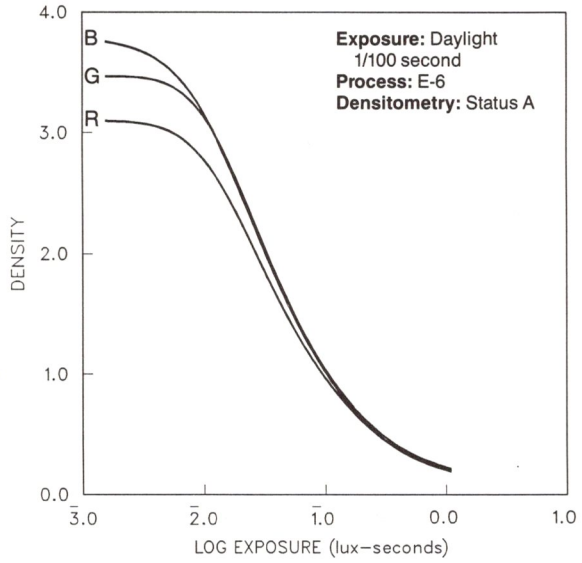
IMAGE STRUCTURE

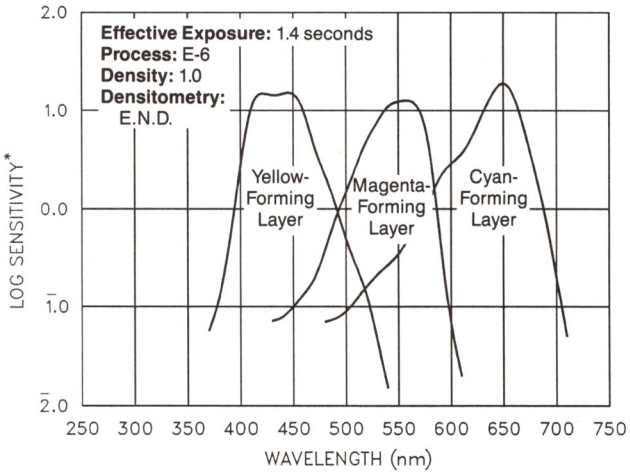
Diffuse rms Granularity* 11

*Read at a gross diffuse visual density of 1.0, using a 48-micrometre aperture, 12X magnification.

CHARACTERISTIC CURVES

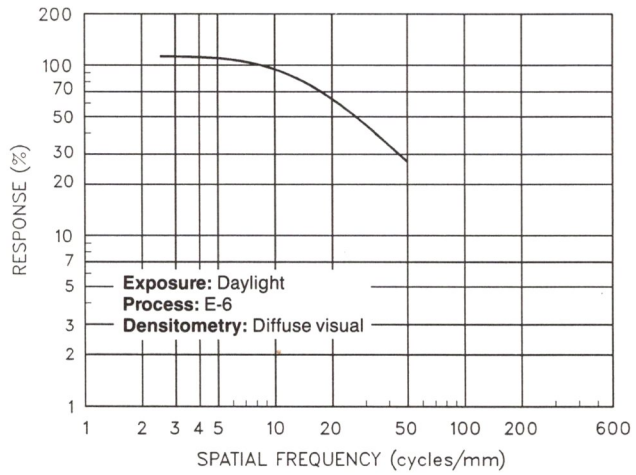


SPECTRAL-SENSITIVITY CURVES

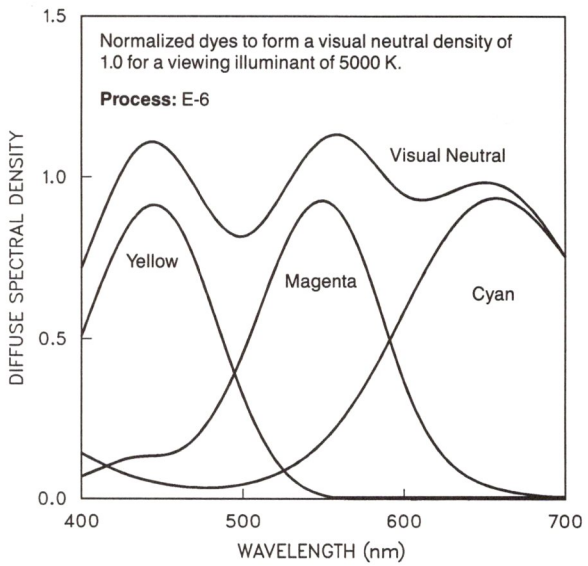


*Sensitivity = reciprocal of exposure (ergs/cm²) required to produce specified density

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.

KODAK EKTACHROME 100X Professional Film

PROCESSING

Process KODAK EKTACHROME 100X Professional Film in Process E-6 chemicals.

PRINTING TRANSPARENCIES

To make duplicate color transparencies by direct printing, use KODAK EKTACHROME Duplicating Films or KODAK EKTACHROME Overhead Material (for overhead transparencies). Or you can make internegatives on KODAK VERICOLOR Internegative Film and print them on KODAK VERICOLOR Print Film, KODAK VERICOLOR Slide Film, KODAK DURATRANS® RA or DURATRANS Display Material, or KODAK DURACLEAR™ RA Display Material.

You can make color prints by printing transparencies directly onto KODAK EKTACHROME Papers or Material. Or you can make internegatives and print them on KODAK EKTACOLOR PORTRA, EKTACOLOR SUPRA, or EKTACOLOR ULTRA Paper; KODAK EKTACOLOR PLUS or Professional Paper; or KODAK DURAFLEX® RA or DURAFLEX Print Material. You can also print transparencies by the dye-transfer process.

MORE INFORMATION

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

B-3	*Handbook of KODAK Photographic Filters*
E-16	*Making Professional Prints on KODAK EKTACHROME Papers and Overhead Material*
E-30	*Storage and Care of KODAK Films and Papers*
E-35	*KODAK EKTACHROME P800/1600 Professional Film*
E-38	*KODAK EKTACHROME Duplicating Films (Process E-6)*
E-60	*KODAK EKTACHROME 64X Professional Film*
E-161	*KODAK EKTACHROME 400X Professional Film*
J-83	*KODAK Chemicals, Process E-6*
R-19	*KODAK Color Darkroom DATAGUIDE*
Z-119	*Using KODAK Chemicals, Process E-6*

The Kodak materials described in this publication for use with KODAK EKTACHROME 100X Professional Film are available from dealers who supply Kodak professional products. You can use other materials, but you may not obtain similar results.

Professional Imaging
EASTMAN KODAK COMPANY • ROCHESTER, NY 14650

KODAK EKTACHROME 100X
Professional Film
KODAK Publication No. E-125

Minor 12-91-AX
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