

# KODAK PROFESSIONAL ELITE Chrome 100 Film



KODAK PROFESSIONAL ELITE Chrome 100 Film is a 100-speed daylight film that offers photographers outstanding image structure with natural colors. It provides excellent reproduction of skin tones, colors, and neutrals. Designed for exposure with daylight or electronic flash, this film is the ideal choice for general picture-taking applications.

ELITE Chrome 100 Film features the latest advancements in Kodak's Color Amplifying Technology and KODAK T-GRAIN® Emulsion Technology to deliver both exceptionally fine grain (rms 8), and beautiful, lifelike color.

You can use this film to produce color slides for projection, or have color prints, enlargements, duplicate slides, internegatives, and photo CDs made from your original slides. You can also use photo kiosk systems such as the KODAK Picture Maker to make color prints and enlargements.

FEATURES	BENEFITS
<ul style="list-style-type: none"> <li>High efficiency T-GRAIN Emulsion Technology</li> </ul>	<ul style="list-style-type: none"> <li>Delivers very clear pictures, even with a high degree of enlargement, without having to worry about grain</li> </ul>
<ul style="list-style-type: none"> <li>Lower D-min</li> </ul>	<ul style="list-style-type: none"> <li>Whiter, brighter whites and more overall snap to your images</li> </ul>
<ul style="list-style-type: none"> <li>Lower contrast tone scale</li> </ul>	<ul style="list-style-type: none"> <li>Captures the details in highlights and shadows</li> </ul>
<ul style="list-style-type: none"> <li>Matched color records</li> </ul>	<ul style="list-style-type: none"> <li>Reproduces skin tones pleasingly and naturally</li> <li>Clean and consistent gray scale rendition</li> </ul>

## STORAGE AND HANDLING

Load and unload film in subdued light.

Store unexposed film at 21°C (70°F) or lower in the *original sealed package*. Always store film in a cool, dry place. Process film as soon as possible after exposure.

Protect slides from strong light, and store them in a cool, dry place. For more information on storing color slides, see KODAK Publication No. E-30, *Storage and Care of KODAK Photographic Materials—Before and After Processing*.

## SIZES AVAILABLE

Sizes and catalog numbers may differ from country to country. See your dealer who supplies Kodak Products.

Rolls	Code	Base	CAT No.
135-24	EB	5-mil acetate	111 3612
135-24 (carded)			151 8901
135-36			187 1490

## DARKROOM RECOMMENDATIONS

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

## EXPOSURE

Use the exposure index (EI) numbers below with meters and cameras marked for ISO or ASA speeds. 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	Exposure Index
Daylight or Electronic Flash	None	100
Tungsten (3200 K)	80A	25

### 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/hazy sun on 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, open shade†	1/125	f/5.6

\* Use f/8 for backlit close-up subjects.

† Subject shaded from the sun but lit 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. First select the unit 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 your slides are consistently too thin (overexposed), use a higher guide number; if they are too dense (underexposed), use a lower number.

Unit Output (BCPS)*	Guide Number	
	Distance in Feet	Distance 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

## Fluorescent and High-Intensity Discharge Lamps

Use the color-compensating filters and exposure adjustments below as starting points to expose these films 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.

Fluorescent Lamp	KODAK Color Compensating Filters	Exposure Adjustment
Daylight	50R	+ 1 stop
White	40M	+ 2/3 stop
Warm White	20C + 40M	+ 1 stop
Warm White Deluxe	30B + 30C	+ 1 1/3 stops
Cool White	40M + 10Y	+ 1 stop
Cool White Deluxe	20C + 10M	+ 2/3 stop
Unknown Fluorescent*	30M	+ 2/3 stop

\* When the type of fluorescent lamp is unknown, try this filter and exposure adjustment; color rendition may be less than optimum.

High-Intensity Discharge Lamps	KODAK Color Compensating Filters	Exposure Adjustment
General Electric Lucalox*	80B + 20C	+ 2 1/3 stop
General Electric Multi-Vapor	20R + 20M	+ 2/3 stop
Deluxe White Mercury	30R + 30M	+ 1 1/3 stops
Clear Mercury	70R	+ 1 1/3 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 due to differences in spectral characteristics.

**Note:** Consult the manufacturer of high-intensity lamps for ozone ventilation requirements and safety information on ultraviolet radiation.

Some primary color filters were used in the previous tables to reduce the number of filters and 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.

## Reciprocity Adjustments for Long and Short Exposures

No filter correction or exposure compensation is required for exposure times from 1/10,000 to 10 seconds. At exposure times of 120 seconds, add CC10R filtration.

**Note:** This information applies only when the films are exposed to daylight. The data are based on average emulsions rounded to the nearest 1/3 stop and assume normal, recommended processing. Use the data only as a guide. For critical applications, make tests under your conditions.

## PROCESSING

Process KODAK ELITE Chrome Films in KODAK Chemicals, Process E-6.

## PRINTING TRANSPARENCIES

You can make color prints or enlargements photographically by making an internegative and printing on Kodak color negative paper.

You can also make prints and enlargements with a KODAK Picture Maker. This self-serve picture kiosk makes prints from wallet to 8 x 10-inches, and allows you to remove red-eye, add text and borders, and make calendars. See your photo dealer for availability in your area.

## SCANNING TRANSPARENCIES

You can easily scan ELITE Chrome 100 Film with a variety of linear-array-CCD, area-array-CCD, and PMT film scanners. You can scan slides on desk-top scanners as well as high-end drum scanners.

Because no standards exist to define the colored filter sets that film scanners use to capture the red, green, and blue information of the film image, each manufacturer's scanner has its own characteristic output. The output depends on the scanner's sensitivity to the dyes in the film. This sensitivity is determined by the spectral distribution of the colored filter sets and/or the spectral sensitivity of the charge-coupled-device (CCD). In addition to these spectral specifications, scanner output depends on the look-up tables or matrices that the scanner uses to output information for CRT monitors, transmission, etc. These tables or matrices are part of either "plug-in" programs used with specific software packages designed for image manipulation, updateable ROMs included with the equipment, or fixed algorithms for calibrating and balancing.

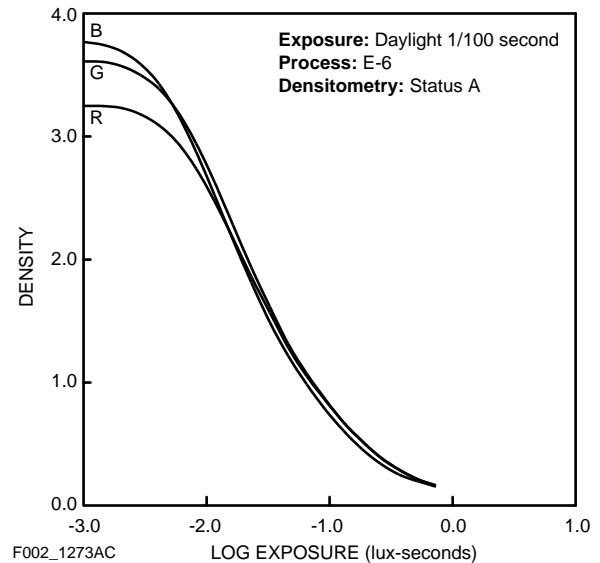
The generic "color slide film" setting available with scanner software is only a starting point. You can adjust the final color balance and the scene-dependent contrast and brightness of an image by using the scanner's controls during pre-scan, or by using an image-manipulation software program or workstation after acquisition. Some scanners allow you to use "plug-in" programs to customize scanner setups.

## CURVES

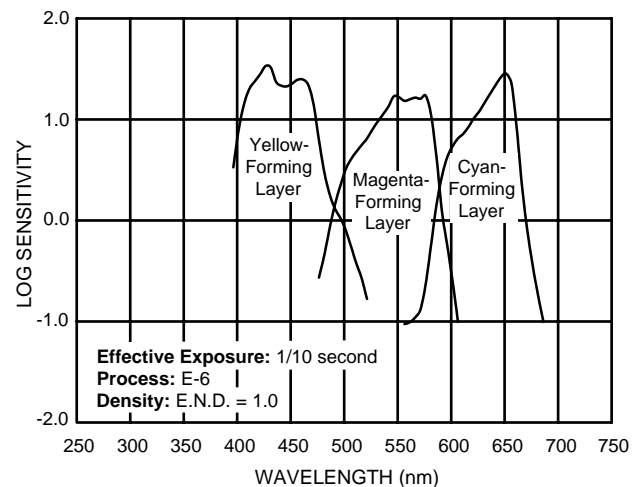
Diffuse rms Granularity\* 8 (extremely fine)

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

### Characteristic Curves



### Spectral-Sensitivity Curves

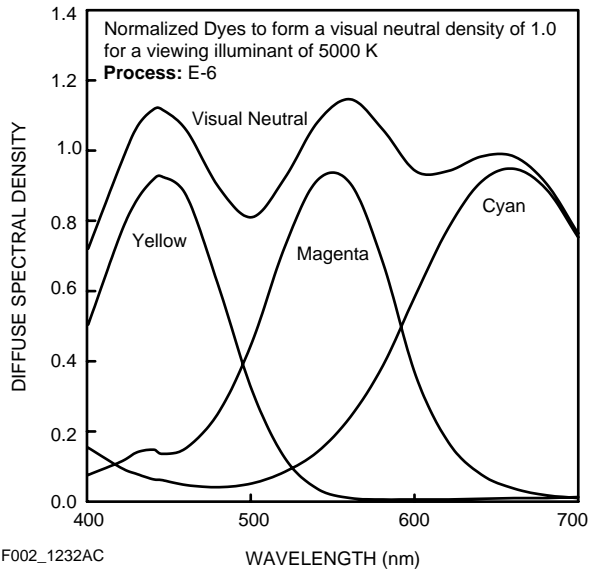


\*Sensitivity = reciprocal of exposure (erg/cm<sup>2</sup>) required to produce specified density

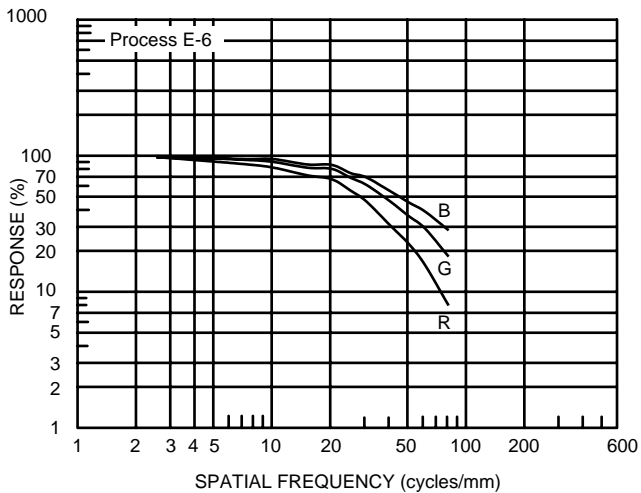
**NOTICE:** The sensitometric curves and data in this publication represent product tested under the conditions of exposure and processing specified. They are representative of production coatings, and therefore do not apply directly to a particular box or roll of photographic material. They do not represent 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.

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## Spectral-Dye-Density Curves



## Modulation-Transfer Curves



## MORE INFORMATION

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

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

- E-30 *Storage and Care of KODAK Photographic Materials—Before and After Processing*
- E-126 *KODAK PROFESSIONAL ELITE Chrome Extra Color 100 Film*
- E-148 *KODAK PROFESSIONAL ELITE Chrome 200 Film*
- E-149 *KODAK PROFESSIONAL ELITE Chrome 400 Film*
- Z-119 *Using KODAK Chemicals, Process E-6*

For the latest version of technical support publications for KODAK Products, visit Kodak on-line at:  
<http://www.kodak.com>

If you have questions about KODAK Products, call Kodak.

In the U.S.A.:

1-800-242-2424, 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)

**Note:** The Kodak materials described in this publication for use with KODAK PROFESSIONAL ELITE Chrome 100 Film are available from dealers who supply Kodak Products. You can use other materials, but you may not obtain similar results.

Digital and Film Imaging Systems  
EASTMAN KODAK COMPANY • ROCHESTER, NY 14650

