## KODAK EKTACHROME 64T Professional Film

This medium-speed color transparency film features excellent color reproduction, very fine grain, and very high sharpness. It is designed for exposure with tungsten illumination

(3200 K). The film is an excellent choice for photographing products, room interiors, titles, and artwork. Primary applications include catalog, furniture, and architectural photography, and copying.

KODAK EKTACHROME 64T Professional Film has an intended exposure range of 1/10,000 second to 10 seconds.

Use this film to produce color transparencies for viewing with 5000 K illumination. You can also use the transparencies for printing by photomechanical methods and by photographic methods of direct duplication and direct reversal printing. In addition, you can scan transparencies for digital printing and for graphic arts and photo CD applications.

FEATURES	BENEFITS
Accurately records neutral colors	<ul> <li>Excellent color reproduction</li> <li>Ideal for catalog, architectural, and commercial applications</li> </ul>
Outstanding reciprocity characteristics	<ul> <li>Consistent color balance and speed over a wide range of exposure times</li> </ul>
Balanced for 3200 K (tungsten) studio lamps	<ul> <li>Good choice for photographing still lifes, making titles using a copy stand, and copying artwork</li> </ul>

# Kodak

#### SIZES AVAILABLE

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

Rolls	Film Code	Acetate Base	CAT No.
135-36	EPY	5-mil (0.13 mm)	853 3093
120	EPY	3.9-mil (0.10 mm)	110 0288

Long Rolls	Film Code	Acetate Base	Sp. No.	CAT No.
35 mm x 100-ft, perf both edges	EPY	5-mil (0.13 mm)	404	899 0012
35 mm x 400-ft, perf both edges	EPY		663	830 0071

Sheets	Size (inches)	Film Code	ESTAR Thick Base	CAT No.
10 50	4 x 5			122 5424 120 8263
50	5 x 7	EPY	7-mil* (0.18 mm)	120 8453
10 50	8 x 10		(01101111)	122 5507 120 8289
KODAK PROFESSIONAL READYLOAD Single-Sheet Packet				
20†	4 x 5	EPY	7-mil (0.18 mm)	140 9986

\*Base will change from 8.2 acetate to 7-mil (0.18 mm) ESTAR Thick Base during 2001.

<sup>†</sup>For use with the KODAK READYLOAD Packet Film Holder or other holders such as the POLAROID Model 545i Film Holder.

#### STORAGE AND HANDLING

Load and unload roll film in subdued light. Load and unload sheet film in total darkness using light-tight film holders.

Store unexposed film in a refrigerator at 13°C (55°F) 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 transparencies from strong light, and store them in a cool, dry place. For more information, see KODAK Publication No. E-30, *Storage and Care of KODAK Photographic Materials—Before and After Processing.* 

#### DARKROOM RECOMMENDATIONS

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

#### EXPOSURE

#### **Exposure Index Numbers**

Use the exposure index numbers below with cameras or light meters marked for ISO or ASA speeds or exposure indexes (EI). Do not change the film-speed setting when metering through a filter. Metering through filters may affect 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
Tungsten (3200 K)	None	64
Photolamp (3400 K)	81A	50
Daylight or Electronic Flash	85B	40

#### **Tungsten Light**

For best color rendition, use tungsten photolamps (3200 K) at their rated voltage. If voltage varies significantly, the color of the lamp will change. Other light sources may not give equally good results, even with filters. Unless you want a special effect, do not mix light sources, particularly tungsten light and daylight.

#### Fluorescent and High-Intensity Discharge Lamps

Use the color-compensating filters and exposure adjustments 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. Vary the recommended filtration by at least  $\pm$ 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 second or longer.

Fluorescent Lamps	KODAK Color Compensating Filters	Exposure Adjustment
Daylight	No. 85B + 40M + 30Y	+1 2/3 stops
White	50R + 10M	+1 1/3 stops
Warm White	50M + 40Y	+1 stop
Warm White Deluxe	10R	+1/3 stop
Cool White	60R	+1 1/3 stops
Cool White Deluxe	20M + 40Y	+2/3 stop
Unknown Fluorescent*	50R	+ 1 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*	50M + 20C	+1 stop
General Electric Multi-Vapor	60R + 20Y	+1 2/3 stops
Deluxe White Mercury	70R + 10Y	+1 2/3 stops
Clear Mercury	90R + 40Y	+2 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.

#### **Adjustments for Long and Short Exposures**

No filter correction or exposure compensation is normally required for EKTACHROME 64T Professional Film at exposure times of 1/10,000 second to 10 seconds. For a 100-second exposure, increase exposure by 1/3 stop and add a CC05R filter.

For more specific information when using sheet film, see the product packaging. Exposure index and filter recommendations for the specific emulsion number are listed on the box. Included are recommendations at 1/10, 5, 30, and 100 seconds.

#### PROCESSING

Process EKTACHROME 64T Professional Film in KODAK Chemicals, Process E-6.

For consistent processing of this and all other EKTACHROME Films, use a lab that is a member of the KODAK Q-LAB Process Monitoring Service.

#### RETOUCHING

Use KODAK E-6 Transparency Retouching Dyes. You can chemically retouch sheet and 120-size film on both the base and the emulsion side. Retouch only the emulsion side on the 135 size. For information on retouching equipment, supplies, and techniques, see KODAK Publication No. E-68, *Retouching Transparencies on KODAK EKTACHROME Film.* 

#### PRINTING TRANSPARENCIES

You can reproduce images made on EKTACHROME 64T Professional Film by using a variety of Kodak materials:

#### **Duplicate Color Transparencies**

For direct printing, use— KODAK PROFESSIONAL EKTACHROME Duplicating Film EDUPE

Or make internegatives on KODAK Commercial Internegative Film, and print them on—

KODAK PROFESSIONAL ENDURA Transparency Optical Display Material

KODAK PROFESSIONAL ENDURA Clear Optical Display Material

#### **Color Prints**

For direct printing, use—

KODAK EKTACHROME RADIANCE III Papers

KODAK EKTACHROME RADIANCE III SELECT Material

Or make internegatives on KODAK Commercial Internegative Film, and print them on—

KODAK PROFESSIONAL PORTRA ENDURA Paper

KODAK PROFESSIONAL SUPRA ENDURA Paper

KODAK PROFESSIONAL ULTRA ENDURA Paper

KODAK PROFESSIONAL DURAFLEX® Plus Digital Display Material

KODAK PROFESSIONAL ENDURA Metallic Paper

#### **Digital Files**

You can scan your image to a file and print digitally to— KODAK PROFESSIONAL ENDURA Transparency Digital Display Material

KODAK PROFESSIONAL ENDURA Clear Digital Display Material

KODAK PROFESSIONAL DURAFLEX® Plus Digital Display Material

KODAK PROFESSIONAL ENDURA Metallic Paper

KODAK PROFESSIONAL Day/Night Digital Display Material

#### SCANNING TRANSPARENCIES

#### For Graphic Arts Applications

The KODAK EKTACHROME Film family is characterized by sets of image dyes which perform similarly when scanned. The scanner operator can set up one basic tone scale and color-correction channel for all EKTACHROME Films and then optimize the tone scale and gray balance for the requirements of individual images.

Use the KODAK Color Input Target / Q-60E1 (4 x 5inch transparencies) or Q-60E3A (35 mm slide) to establish the setup for KODAK EKTACHROME Films on all scanners. This target meets ANSI standards and represents the dye sets of all EKTACHROME Films.

#### **For Photo CD Applications**

Use the Universal E-6 Film Term to scan all KODAK EKTACHROME films for Photo CD Imaging Workstation applications.

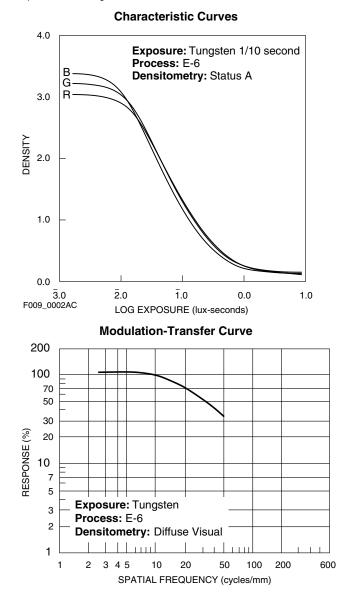
For Output to a Photo CD Player: Using the Universal E-6 Film Term should result in an image that closely matches your original transparency in density, tone scale, and overall color balance when viewed on a player.

For Output to Devices Other than Photo CD Players: The YCC data that results when using the Universal E-6 Film Term is capable of producing a high-quality duplicate of your original transparency in terms of density, tone scale, and color reproduction. Final quality of your reproduced image depends on the capabilities of your output device, the viewing environment, and the rendering path used.

#### **CURVES**

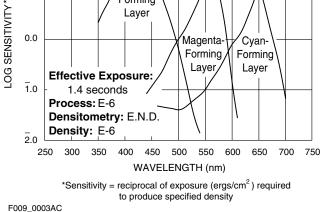
#### Diffuse rms Granularity<sup>\*</sup> 11 (very fine)

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

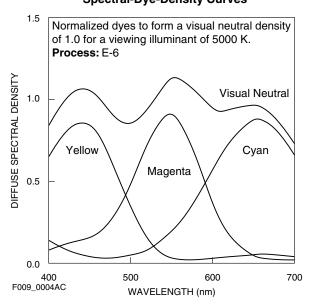


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Yellow-Forming Layer



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.

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#### **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, from dealers who sell Kodak products, or you can contact Kodak in your country for more information.

E-8	KODAK EKTACHROME 64 Professional Film
E-27	KODAK EKTACHROME 100 Professional Film
E-28	KODAK PROFESSIONAL EKTACHROME Film E200
E-30	Storage and Care of KODAK Photographic Materials—Before and After Processing
E-31	Reciprocity and Special Filter Data for KODAK Films
E-38	KODAK EKTACHROME Duplicating Films
E-68	Retouching Transparencies on KODAK EKTACHROME Film
E103RF	KODAK PROFESSIONAL Color Reversal Films
E-113	KODAK EKTACHROME 100 Plus Professional Film
E-144	KODAK EKTACHROME 160T Professional Film
E-145	KODAK EKTACHROME 320T Professional Film
E-147	KODAK EKTACHROME P1600 Professional Film
E-161	KODAK EKTACHROME 400X Professional Film
E-163	KODAK PROFESSIONAL EKTACHROME Film E100VS
E-4024	KODAK PROFESSIONAL EKTACHROME Films E100G and E100GX
E-2529	KODAK PROFESSIONAL EKTACHROME Duplicating Film EDUPE

For the latest version of technical support publications for KODAK PROFESSIONAL Products, visit Kodak on-line at: http://www.kodak.com/go/professional If you have questions about KODAK PROFESSIONAL Products, call Kodak. In the U.S.A.: 1-800-242-2424, Ext. 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)

**Note:** The Kodak materials described in this publication for use with KODAK EKTACHROME 64T 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**