KODAK EKTACHROME 64T Professional Film

Kodak

TECHNICAL DATA / **COLOR REVERSAL FILM**

July 2007 • E-130

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	• Excellent color reproduction • Ideal for catalog, architectural, and commercial applications
• Outstanding reciprocity characteristics	• Consistent color balance and speed over a wide range of exposure times
• Balanced for 3200 K (tungsten) studio lamps	• Good choice for photographing still lifes, making titles using a copy stand, and copying artwork

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
135-36	EPY	5-mil (0.13 mm)
35 mm x 100-ft	EPY / SP404	
35 mm x 400-ft	EPY / SP663	
120	EPY	3.9-mil (0.10 mm)

Sheets	Film Code	ESTAR Thick Base
4 x 5	EPY	7-mil (0.18 mm)
5 x 7		
8 x 10		

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*.

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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 ±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

Color Prints

You can scan your image to a file and print digitally to—

KODAK PROFESSIONAL PORTRA, SUPRA, and ULTRA ENDURA Papers

KODAK PROFESSIONAL ENDURA Clear Digital Display Material

KODAK PROFESSIONAL ENDURA Transparency Display Material

KODAK PROFESSIONAL ENDURA Metallic Paper

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.

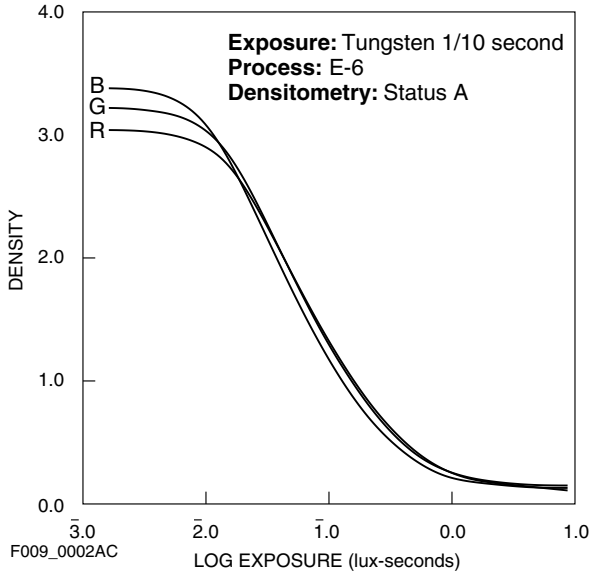
For Output to Devices Other than Photo CD Players: The YCC data that results when using the Universal E-6 Film Term is capable of producing a high-quality duplicate of your original transparency in terms of density, tone scale, and color reproduction. Final quality of your reproduced image depends on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

CURVES

Diffuse rms Granularity* **11 (very fine)**

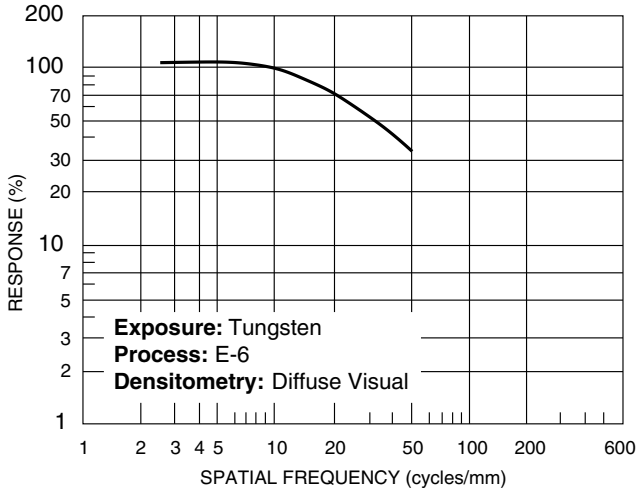
*Read on a gross diffuse visual density of 1.0, using a 48-micrometre aperture, 12X magnification.

Characteristic Curves



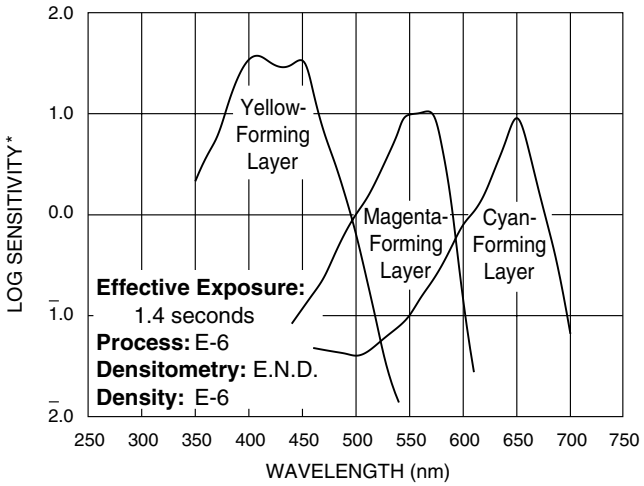
F009_0002AC

Modulation-Transfer Curve



F009_0001AC

Spectral-Sensitivity Curve



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

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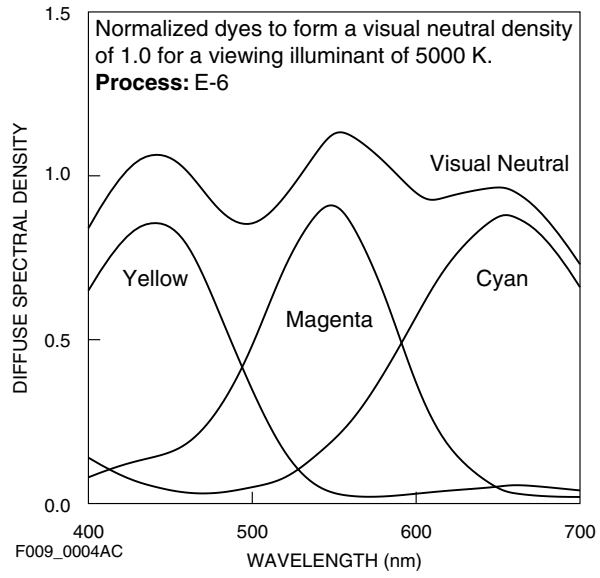
Spectral-Dye-Density Curves



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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

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.

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