



Kodak

Ektacolor Royal VII

PAPER • PAPIER • PAPEL

DESCRIPTION

KODAK EKTACOLOR ROYAL VII Paper is a resin-coated color paper for printing color negatives. It is designed for processing in KODAK EKTACOLOR RA Chemicals for Process RA-4.

This paper is available in rolls in F and N surfaces. It replaces KODAK EKTACOLOR ROYAL V Paper. Compared to EKTACOLOR ROYAL V Paper, this paper features the following improvements:

FEATURES	BENEFITS
Increased color saturation	Brighter colors
New paper technology for optimizing current and future color imaging systems	- Better images for consumers - Kodak films and papers optimized to provide the highest-quality images
Improved print longevity	Significantly better print longevity for display under typical home lighting conditions and for dark storage (e.g., album keeping)
Improved raw-stock keeping	- Reduced printer variability - Better product consistency
Paper modifications that help maintain cleaner processing solutions	Fewer maintenance sessions for system/roller cleaning
Improved resistance to abrasion marks during processing	Reduced paper waste (i.e., reprints) without an increase in processor maintenance

STORAGE AND HANDLING

Store unexposed paper at 55°F (13°C) or lower in the original package for optimum results. You can store unexposed paper at 75°F (24°C) for up to six months, and still achieve high-quality results. High temperatures or high humidity may produce unwanted quality changes.

To avoid moisture condensation on paper that has been refrigerated, allow it to warm up to room temperature before opening the package. *For best results, remove the package from cold storage the day before you use it, or allow the paper to warm up for the appropriate time listed in the following table.*

Minimum Warm-Up Time (Hours) at Ambient Temperature of 70°F (21°C)			
Rolls (in. x ft)	From a Storage Temperature of		
	0°F (-18°C)	35°F (2°C)	53°F (13°C)
3½ x 245	5	4	3
3½ x 490	8	6	4
3½ x 675 3½ x 853	10	8	6
4 x 245	6	4	3
4 x 490	8	6	4
4 x 675 4 x 853	10	8	6
5 x 245	6	4	3
5 x 490	8	6	4
5 x 675	10	8	6
6 x 245	6	5	3
6 x 490	8	6	4
8 x 245 10 x 245	7	5	4
11 x 90* 11 x 245 12 x 245	8	6	4

*Designed for the KODAK CREATE-A-PRINT 35 mm Enlargement Center.

DARKROOM RECOMMENDATIONS

Handle this paper in *total darkness*. Be sure that your darkroom is lighttight. Eliminate stray light from timers, LEDs, etc.

Note: Using a safelight *will* affect your results. *If absolutely necessary*, you can use a safelight equipped with a KODAK 13 Safelight Filter (amber) with a 7½-watt bulb. Keep the safelight at least 4 feet (1.2 metres) from the paper. Keep safelight exposure as short as possible. Run tests to determine whether safelight use gives acceptable results for your application. For information on safelight testing, see KODAK Publication K-4, *How Safe is Your Safelight?*

EXPOSURE

Printers

You can expose this paper in automatic printers, such as KODAK CREATE-A-PRINT 35 mm Enlargement Centers, KODAK Minilab Systems, KODAK 312 Color Printers, Agfa high speed printers, Gretag high speed printers, Gretag minilabs and microlabs, Noritsu minilabs and microlabs, and others.

Note: Printer and balance slope changes may be necessary. Check production after final balance. You may want to make a color preference adjustment.

If you are using Agfa MSP or MSC printers, contact your Kodak representative to obtain new Schwarzschild coefficients.

Because voltage changes affect light output and color quality, use a voltage regulator. Use a tungsten-halogen lamp to expose the paper. Do not use a fluorescent lamp. If the printer has no means of removing infrared radiation, use a heat-absorbing glass.

Keep negatives and the optical system of your printing equipment clean. Mask negatives to eliminate stray light.

To control the color balance, use dichroic filters, KODAK Color Printing Filters (CP), or KODAK Color Compensating Filters (CC) placed between the lamp and the negative. You can also use CC filters between the lens and the paper if they are clean and unscratched. Use as few CC filters between the lens and the paper as possible—preferably not more than three. If you use cyan filtration, use filters with the suffix “-2,” such as CP10C-2.

Start with a filter pack of 40M + 40Y for the white-light method. Adjust filtration as needed.

Printer Control Negative Sets

Use the appropriate KODAK Printer Control Negative Set to determine aims for KODAK Color Negative Films or to cross over from another type of color paper to EKTACOLOR ROYAL VII Paper.

LATENT-IMAGE KEEPING

For best results, process paper on the same day you expose it. (If latent-image shifts occur, minimize them by keeping the time between exposure and processing as consistent as possible.)

PROCESSING

Use KODAK EKTACOLOR RA Chemicals for Process RA-4. Use KODAK Control Strips, Process RA-4 to monitor your process.

Use a drying temperature below 200°F (93°C). Do not ferrotype this paper; the F surface dries to a natural gloss without ferrotyping.

PRINT VIEWING

Evaluate prints under light of the same color and brightness that you will use to view the final prints. A good average condition is a light source with a color temperature of 5000 K ± 1000 K, a Color Rendering Index (CRI) of 85 to 100, and an illuminance of at least 50 footcandles (538 lux). Fluorescent lamps such as a cool white deluxe lamp (made by several manufacturers) meet these conditions. You can also use a mixture of fluorescent and incandescent lamps. For each pair of 40-watt cool white deluxe lamps, use a 75-watt frosted tungsten bulb.

PRINT FINISHING

Dust Spotting

Use KODAK Liquid Retouching Colors to correct dust spots on prints made on this paper. To apply the dyes, follow this procedure:

1. If necessary, clean the surface of the print by buffing it with a tuft of cotton before you start retouching. Be careful not to scratch the surface. Protect the print from fingerprints and perspiration by wearing cotton gloves (e.g., KODAK Cotton Gloves).
2. Transfer a small amount of the dye(s) you need to a palette.
3. If necessary, add a touch of neutral dye to the puddle of pure colored dye. The neutral dye will reduce the brilliance of the pure colors by adding density. For good control, keep the dilutions weak by adding a little distilled water. This allows you to build up the dye gradually on the print. It is easier to add dye gradually than to remove it if you apply too much.

Note: If the liquid dyes on your palette dry out, you can add water to dilute them again.

4. Pick up a small amount of dye with your brush, and stroke the brush on newsprint or a paper towel to blot it *thoroughly*. Too much moisture can cause opalescence, or a cloudy look, on the print. Rotate the tip on the newsprint to form a good point. Do not touch the brush to your tongue or lips to form a point.
5. Retouch the print with light strokes of the brush; be sure to keep the dye within the area of the spot. Avoid spilling over into the surrounding area. Any overlapping will make a dark ring around the spotted area.
6. If you apply too much color, blot it quickly with newsprint or you will have too much density in the spot. If too much dye penetrates the emulsion, you can remove it with a 5-percent clear ammonia-water solution. (You can make a 5-percent solution by mixing 5 parts of 28-percent liquid ammonium hydroxide with 23 parts water.) Apply the solution with a tuft of cotton, rubbing with a circular motion. Be sure to apply it only to the area where you want to remove the dye. Then swab the area with clean water-dampened cotton. Repeat if necessary with a fresh tuft of cotton. Be sure to remove all of the ammonia. Allow the area to dry thoroughly before you resume retouching. For best results, remove unwanted dye quickly.

Mounting Prints

For prints displayed behind glass, maintain a slight separation between the prints and the glass.

STORAGE AND DISPLAY OF PRINTS

EKTACOLOR ROYAL VII Paper has been formulated to provide improved dye stability and print longevity for prints displayed under typical home lighting conditions (i.e., 120 lux for 12 hours a day). Product modifications have provided an improvement in the fade neutrality when compared with current papers.

Despite the improvements in print longevity and fade neutrality, photographic dyes, like all dyes, can change with time and exposure to sunlight, ultraviolet radiation, excessive heat, and high humidity. To help prevent changes in photographic dyes, follow these guidelines:

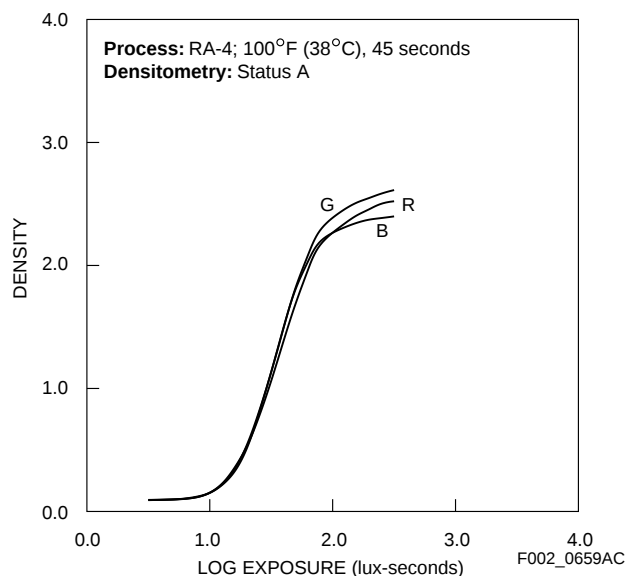
- Display prints in the lowest light level consistent with your viewing needs. Tungsten lighting is the preferred artificial light source.
- If a print is exposed to direct or indirect sunlight or fluorescent light, use an ultraviolet-absorbing filter (such as glass) between the light source and the print.
- Keep the temperature and humidity as low as possible.
- Use album materials described in KODAK Publication No. E-30, *Storage and Care of KODAK Photographic Materials—Before and After Processing*.

SIZES AVAILABLE

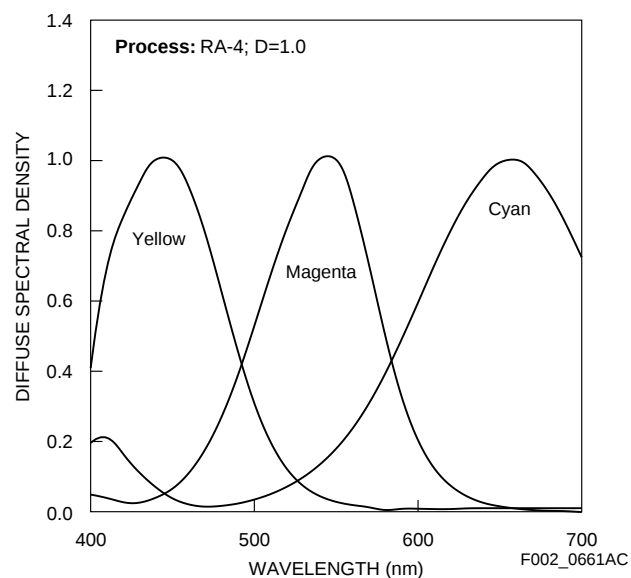
Roll Width	Roll Length			
	245´	490´	675´	853´
3.5"	✓	✓	✓	✓
4"	✓	✓	✓	✓
5"	✓	✓	✓	
6"	✓	✓		
8"	✓			
10"	✓			
11"	✓			
12"	✓			

CURVES

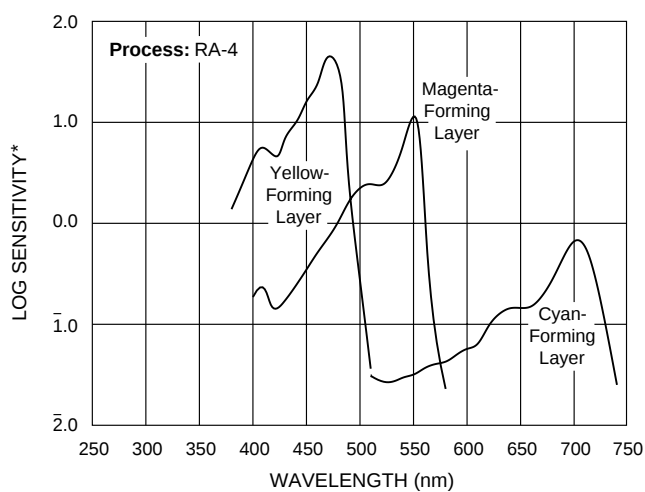
Characteristic Curves



Spectral-Dye-Density Curves



Spectral-Sensitivity Curves



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

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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 product characteristics at any time.

KODAK EKTACOLOR ROYAL VII Paper

MORE INFORMATION

Kodak has many publications to assist you with information on Kodak products, equipment, and materials. The following publications are available 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-30 *Storage and Care of KODAK Photographic Materials—Before and After Processing*
- J-36 *Choosing the Right Chemicals for Your Minilab*

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

1-800-242-2424, Ext. 33

If you have questions about Kodak products, call Kodak.

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*1-800-465-6325, Monday–Friday
8:30 a.m.–5 p.m. (Eastern time)*

*Or contact Kodak on-line at:
www.kodak.com/*

Note: The Kodak materials described in this publication for use with KODAK EKTACOLOR ROYAL VII Paper are available from dealers who supply Kodak products to photofinishers. You can use other materials, but you may not obtain similar results.

**This publication is printed on recycled paper that contains
50 percent recycled fiber and 10 percent post-consumer material.**

Consumer Imaging
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