

KODAK EKTAMAX RA

Professional Paper



NOTICE

*****This product is discontinued.*****

**Suggested replacement is KODAK PROFESSIONAL
PORTRA Black & White Paper.**

DESCRIPTION

KODAK EKTAMAX RA Professional Paper is a fast, chromogenic resin-coated paper for making intermediate-use, non-silver image, black-and-white prints from color or black-and-white negatives. It is designed for processing in KODAK EKTACOLOR RA Chemicals for Process RA-4.

Suggested uses include *intermediate* applications for graphics reproduction, displays, real-estate brochures, publications, press releases, and portrait proofs. The paper may be acceptable for other applications as well, where long-term display or keeping are **not** required. For uses where images require long-term keeping, a traditional silver-image black-and-white paper is a better choice.

The paper is available in two contrast grades: **L** for low-contrast applications such as portraiture and school-picture finishing; and **M** for applications where higher contrast is preferred, such as in photojournalism and commercial photography.

Both M- and L-grade papers are available in F (glossy) surface. The M-grade paper is also available in N (semi-matt) surface in some sizes.

EKTAMAX RA Professional Paper is designed for printing with automatic printers or enlargers.

FEATURES

- Each layer produces a neutral image
- EKTAMAX RA Professional Paper / L—spectral sensitivity, gray-tone rendering, and D-max similar to those of KODAK EKTACOLOR PORTRA III Paper
- EKTAMAX RA Professional Paper / M—spectral sensitivity, gray-tone rendering, and D-max similar to those of KODAK EKTACOLOR SUPRA II Paper
- Designed for processing in KODAK EKTACOLOR RA Chemicals for Process RA-4
- EKTAMAX RA Professional Paper / L—tri-color sensitivity with the same red, green, and blue speeds as EKTACOLOR PORTRA III Paper
- EKTAMAX RA Professional Paper / M—tri-color sensitivity with the same red, green, and blue speeds as EKTACOLOR SUPRA II Paper

BENEFITS

- Excellent image-tone reproduction from color negatives
- Eliminates the need for a dedicated black-and-white process
- Can be printed with the same equipment as EKTACOLOR PORTRA III and SUPRA II Papers; no need to rebalance equipment to produce black-and-white prints

IMPORTANT NOTE

KODAK EKTAMAX RA Professional Paper is an alternative, not a replacement, for traditional black-and-white papers. EKTAMAX RA Professional Papers yield a neutral tone “dye” image. For long-term keeping applications, conventional black-and-white (silver) papers will provide the best performance.

STORAGE AND HANDLING

Store unexposed paper at 13°C (55°F) or lower in the original sealed package. High temperatures or high humidity may produce undesirable photographic changes. Avoid moisture condensation by removing the package from cold storage the day before printing.

Handle paper carefully by the edges. The paper is packaged with the emulsion side of all sheets facing in the same direction. For complete light, moisture, and photo-activity protection, use the inner bag **and** the two-part cardboard box to store the paper.

DARKROOM RECOMMENDATIONS

Handle the paper in total darkness. Be sure that your darkroom is lighttight. Eliminate stray light from enlarger heads, 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) and a 7½-watt bulb. Keep the safelight at least 1.2 metres (4 feet) from the paper. Run tests to determine that safelight use gives acceptable results for your application.

EXPOSURE

You can expose this paper in automatic printers such as the KODAK Digital Print Controller. Set up and balance the printer according to the manufacturer's instructions.

You can also expose the paper with enlargers equipped with tungsten or tungsten-halogen light sources or photo enlarger lamps (e.g., No. 212 or 302).

Do not use fluorescent lamps to expose the paper. Use a heat-absorbing glass to remove infrared radiation. Because voltage changes affect the output and the color quality of the light source, use a voltage regulator.

Keep negatives and the equipment optical system clean. For optimum contrast and gray-tone rendering of colors, use a color filter pack that consists of dichroic filters, KODAK Color Printing Filters (CP), or KODAK Color Compensating Filter (CC). You can use CP or CC filters between the lamp and the negative. You can also use CC filters between the negative and the paper; however, use as few CC filters between the negative and the paper as possible. If you use cyan filtration, use filters with the suffix “-2” (e.g., “CP10C-2”).

The printing conditions for EKTACOLOR PORTRA III Paper are a good starting point for printing color negatives onto EKTAMAX RA Professional Paper / L; the conditions for EKTACOLOR SUPRA II Paper are a good starting point for printing negatives onto EKTAMAX RA Professional Paper / M. If you do not use EKTACOLOR PORTRA III or SUPRA II Paper, use 45M + 45Y as a starting point for filtration. Adjust the exposure as required to control print density. The color of the exposing light can influence the contrast of prints made on these papers. You can remove approximately 20M and 20Y to lower print contrast, or add

magenta and yellow filtration to increase contrast slightly. Do not add more than 20 units of magenta and yellow filtration to increase contrast, as this can impact red color-lightness reproduction.

You can also print black-and-white negatives onto this paper. Use 80M + 110Y filtration as a starting point for maximum contrast. Or you can combine a piece of D-min of the appropriate color-negative film with your black-and-white negative, and use the filtration that you use to print color negatives. Adjust the exposure as required to control print density.

LATENT-IMAGE KEEPING

You should not notice shifts in the latent image with keeping times from 1 minute to 24 hours. Therefore, you do not need to change your printing procedures to compensate for latent-image shifts under normal temperature and handling conditions. (If shifts *do* occur, you can minimize their effect by keeping the time between exposure and processing the same for all paper.)

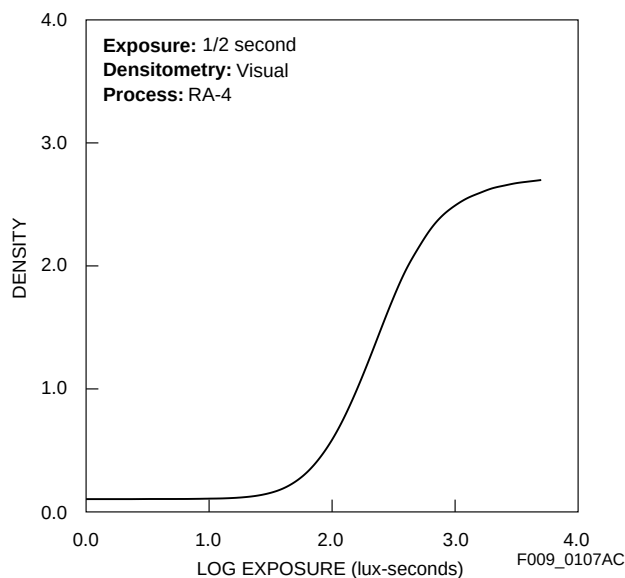
PROCESSING

Use KODAK EKTACOLOR RA Chemicals for Process RA-4 to process these papers.

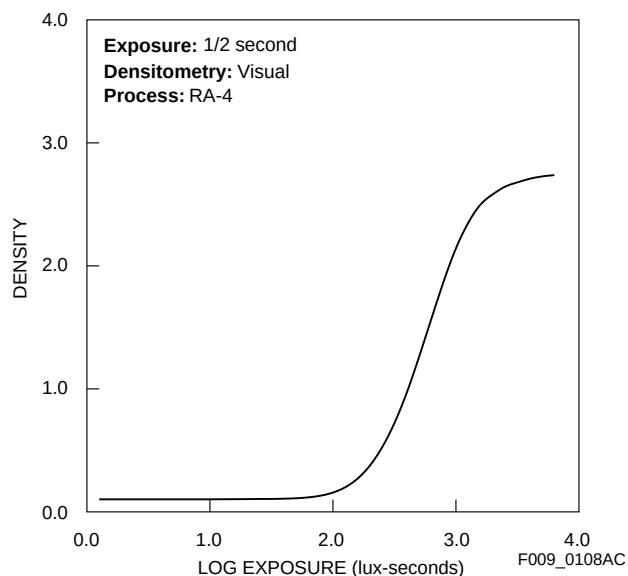
Use a drying temperature below 96°C (205°F). Do not ferrotype these papers.

CHARACTERISTIC CURVES

KODAK EKTAMAX RA Professional Paper / L



KODAK EKTAMAX RA Professional Paper / M



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 at any time.

Using Rolls in High-Speed Printers:

EKTAMAX RA Professional Paper has an anti-static coating on the back (non-emulsion) side. This coating has been optimized for use in professional applications. When using this paper in a high-speed, heat-impulse-splice printer, the special coating may make splices which are weaker than normal. These weaker splices can break during operations after the paper has been exposed. Therefore, we do not recommend using this paper in this type of printer. If you use the paper in a printer of this type, be sure to set your splicing equipment to give as much paper overlap as possible, with paper edges properly aligned. Then make a few test splices to determine if you are achieving a strong enough bond.

SIZES AVAILABLE

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

KODAK EKTAMAX RA Professional Paper / L Rolls

mm x Ft	Sp	Surface	CAT No.
35 x 575	224	F	153 2894
46 X 575	224	F	141 4242

In. x Ft	Sp	Surface	CAT No.
2½ x 575	224	F	186 5708
2¾ x 275	224	F	172 0937
2¾ x 575	224	F	178 7838
3½ x 275	224	F	187 1888
3½ x 575	224	F	100 5008
5 x 275	224	F	189 5739
5 x 575	224	F	158 5686
6 x 575	224	F	148 6307
8 x 275	224	F	169 1062
8 x 575	224	F	178 9007
10 x 275	224	F	823 3223
11 x 275	224	F	121 4493

Sheets

No. of Sheets	Size (inches)	Surface	CAT No.
100	8 x 10	F	185 6400
250	8½ x 11	F	180 1778
50	11 x 14	F	178 7225
50	16 x 20	F	803 5487

KODAK EKTAMAX RA Professional Paper / M Rolls

In. x Ft	Sp	Surface	CAT No.
3½ x 275	224	F	195 8305
4 x 275	224	F	187 8883
5 x 275	224	F	120 0708
5 x 575	224	F	185 9982
6 x 275	224	F	127 9280
6 x 575	224	F	180 4897
8 x 275	224	F	838 9249
12 x 275	224	F	850 9705
20 x 50	87	N	865 4964
30 x 50	87	N	899 4824
40 x 50	87	N	894 2351

Sheets

No. of Sheets	Size (inches)	Surface	CAT No.
100	5 x 7	F	176 8837
100	8 x 10	F	186 6441
250	8½ x 11	F	141 7872
50	11 x 14	F	141 1677
50	16 x 20	F	115 3683
10	20 x 24	N	898 5186
10	30 x 40	N	136 3951

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RETOUCHING

If possible, do any required retouching on color negatives before you make prints—especially if you plan to make more than one print from each negative. For information on retouching negatives, see KODAK Publication No. E-71, *Retouching Color Negatives*.

If the negative image is small, you can make corrections much more easily by applying dry or liquid dyes to small or large areas of the enlarged print. For information on retouching prints, see KODAK Publication No. E-70, *Retouching Prints on KODAK EKTACOLOR and EKTACHROME Papers*.

Note: Do not use oil-base paints, resins, or other materials frequently used to retouch silver-gelatin black-and-white prints. These materials can harm the dye structure of EKTAMAX RA Professional Paper.

VIEWING CONDITIONS

Because EKTAMAX RA Professional Paper uses dyes instead of silver to form the image, the neutrality of the image is affected by the viewing illumination. Use a light source such as daylight, pulse xenon flash, tungsten, or tungsten-halogen/quartz-halogen. These sources provide continuous frequency distribution of energy in the visible spectrum and will result in a neutral rendering of the image.

Non-continuous sources, such as mercury vapor and some fluorescent tubes, can give the image a slightly pink appearance. If a neutral-tone image is important when viewing prints, avoid these types of light sources especially low-energy/high-efficiency fluorescent tubes.

For consistency, labs should always evaluate print quality under the same type of lighting conditions that will be used for print viewing. For an average condition, use a light source with a color temperature of 4000 K $\pm$ 1000 K and a color-rendering index of 85 to 100 (an index of 90 or higher is desirable). General Electric Deluxe Cool White fluorescent tubes, or similar tubes made by several manufacturers, meet these specifications. You can also use warmer tubes such as the Phillips 5000 K Ultralume tube.

You may also obtain satisfactory results using a mixture of incandescent and fluorescent light. For each pair of 40-watt Deluxe Cool White fluorescent tubes, use a 75-watt frosted tungsten bulb.

MORE INFORMATION

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

- E-70 *Retouching Prints on KODAK EKTACOLOR and EKTACHROME Papers*
- E-71 *Retouching Color Negatives*
- E-140 *KODAK EKTACOLOR PORTRA III Paper*
- E-141 *KODAK EKTACOLOR SUPRA II Papers*
- G-27 *KODAK PANALURE SELECT RC Paper*

Kodak Information Center's Faxback System

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

U.S. 1-800-242-2424, Ext. 33

Canada 1-800-295-5531

*If you have questions about Kodak 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)*

Or contact Kodak on-line at:

<http://www.kodak.com/go/professional>



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