

KODAK PROFESSIONAL P-MAX Art RC Paper



—NOTICE—

Due to low volume sales, KODAK PROFESSIONAL P-MAX Art RC Paper has been discontinued.

There is no direct replacement for this paper that had a unique suede surface and was primarily used for hand coloring. KODAK PROFESSIONAL POLYCONTRAST IV RC Paper N, (smooth matte) surface, may be an alternative for some applications.

KODAK PROFESSIONAL P-MAX Art RC Paper is a fast resin-coated black-and-white, enlarging paper designed for hand-coloring with oil paints, liquid or dry dyes, pastels, and pencils. It features a neutral-to warm-black image tone, excellent “tooth,” and a double-matt surface that make it an excellent choice for fine-art applications. It is available in two contrast grades in sheets from 8 x 10 inches to 16 x 20 inches.

You can process this paper in roller-transport or continuous processors or in trays.

FEATURES

BENEFITS

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| <ul style="list-style-type: none"> • Double-matt surface that provides excellent “tooth” • No backprinting • Available in two contrast grades • Resin-coated, water-resistant base | <ul style="list-style-type: none"> • Can be hand-colored with oil paints, dyes, pastels, and pencils • Good writing surface • Allows printmakers to customize prints • Suits a variety of applications • Rapid processing, fast drying, and minimum curl |
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Base and Surface Characteristics

Symbol	Texture	Surface	Base Tint	Base Weight
V	Suede	Double matt	White	Heavy weight

DARKROOM RECOMMENDATIONS

Use a KODAK OC Safelight Filter (light amber) in a suitable safelight lamp with a bulb of 15 watts or less at least 1.2 metres (4 feet) from the paper. Minimize safelight exposure to avoid unwanted quality changes. **Be especially careful** if you use other types of safelights.

See KODAK Publication No.K4, *How Safe is Your Safelight?*, for information on safelight testing.

Note: Do not use a KODAK OA Safelight Filter (greenish yellow).

EXPOSURE

This paper is designed for exposure with tungsten or tungsten-halogen enlarging lamps. You can also use other light sources such as cool-white fluorescent lamps, mercury-vapor lamps, and cathode-ray tubes. Make trial exposures to determine the optimum exposure.

Paper Speed and Range

Contrast Grade	Effective Paper Speed	Log Exposure Range
2	400	0.91 to 1.15
3	400	0.66 to 0.90

STORAGE AND HANDLING

Store unexposed paper in a cool, dry place (preferably at or below 21°C [70°F] and at a relative humidity of 30 to 50 percent). High temperatures or high humidity may produce undesirable changes. Always rewrap unused paper in its original packaging (use the outer box as well as the bag) to protect it from light and moisture. Avoid or shield the paper from exposure to radioactivity or x-rays.

PROCESSING

Machine

You can process this paper in roller-transport processors or continuous processors with KODAK PROFESSIONAL POLYMAX RT Developer and Replenisher and KODAK PROFESSIONAL POLYMAX RT Fixer and Replenisher or KODAK PROFESSIONAL Rapid Fixer, Part A.

For rapid processing of this paper, we recommend KODAK ROYALPRINT Chemicals.

Tray

Tray process with continuous agitation at 20°C (68°F), using the appropriate dilution and development time recommended in the following table.

KODAK PROFESSIONAL Chemical	Dilution (chemical: water)	Time (min:sec)	Capacity (8 x 10-inch Prints per gal/L)
Developer— 20°C (68°F)			
DEKTOL	1:2	1:00	120/32
POLYMAX T	1:9	1:00	120/32
D-72 (formula)	1:2	1:00	100/26
Stop Bath—18 to 24°C (65 to 75°F)			
Indicator	1:64	0:10	80/20 [†]
EKTAFLO	1:31	0:10	80/20 [†]
Fixer (single bath)*—18 to 24°C (65 to 75°F)			
<i>Non-hardening fixer (for general printing and for toning):</i>			
Rapid Fixer, Solution A (do not use Solution B)	1:7	2:00	100/26
<i>Hardening fixers (for general printing)</i>			
KODAK Fixer	—	2:00	100/26
POLYMAX T	1:7	2:00	100/26
Rapid Fixer (Solution A and B)	1:7	2:00	100/26
KODAFIX Solution	1:7	2:00	100/26
Wash— 10 to 30°C (50 to 86°F)			
	—	4:00	—

*Provides greater development latitude.

[†]Discard the solution when color changes to a purplish blue.

[‡]To increase capacity, use two fixing baths.

Developing

Immerse prints face up, flexing the paper so the entire surface gets wet as it goes into the developer. Drain prints for the last 5 seconds before immersing in stop bath.

Stop Bath

Bathe prints for at least 10 seconds at 18 to 24°C (65 to 75°F) with continuous agitation in KODAK PROFESSIONAL EKTAFLO Stop Bath, KODAK PROFESSIONAL Indicator Stop Bath, or 48 mL KODAK 28% Acetic Acid and water to make 1 L.

With EKTAFLO or Indicator Stop Bath, discard the solution when the color changes to a purplish blue. Change Acetic Acid and water stop bath after approximately twenty 8 x 10-inch prints per litre (eighty 8 x 10s per gallon).

Fixing

Fix prints at 18 to 24°C (65 to 75°F) with frequent agitation. If you use two fixing baths, fix prints for 1 minute in each bath, draining for 5 seconds between baths. Fix for 2 minutes if you use a single bath.

Proper fixing is important. Underfixing will leave residual silver halide in the emulsion, which will darken or stain with exposure to light. Overfixing will make washing more difficult, and may slightly bleach the print.

Note: Using a hardening fixer will enhance surface durability. However, using a hardening fixer makes toning less efficient. For the same amount of processing time, you'll see less of a toning effect.

Washing

Wash for at least 4 minutes in running water at 10 to 30°C (50 to 86°F), interleaving the prints carefully and frequently.

Drying

Air-dry at room temperature after removing surface water with a clean, lintless blotter or cloth, or a soft squeegee or sponge. You can also dry prints with warm air, or use a dryer intended for resin-coated papers.

Do not ferrotypes prints made on this paper. You can use ferrotype dryers (glazing machines) below 88°C (190°F) if you squeegee the prints and feed them base side toward the drum surface.

POST-PROCESS TREATMENTS

Except for treatment with a toner solution, post-processing treatments generally don't improve the image stability of prints on Kodak black-and-white fiber papers. Some treatments—for example, laminating—provide physical protection. Some may actually have an adverse effect on prints. The effects of post-processing treatments on prints vary widely with the type of treatment and the manner in which the treatments are applied.

Toning

Treatment with a toner extends the life of prints that may be exposed to oxidizing gases or subjected to adverse storage or display conditions. KODAK PROFESSIONAL Toners will protect prints whether or not they produce a tone shift.

Processing	Tone Shift with KODAK PROFESSIONAL Toners		
	Full	Full to Moderate	None
Tray (with DEKTOL Developer [1:2])	Brown	Sepia	Rapid Selenium (1:3, 1:9, 1:20, 1:40)
	Sepia II Warm		

For more information on toning, see KODAK Publication No. G-23, *Toning KODAK Black-and-White Materials*. It explains the technique of toning, and describes Kodak toners and their effects on Kodak black-and-white papers and films.

Hand-Coloring

You can hand-color prints on this paper with a variety of color media. Use one or a combination of oil paints, dyes, pastels, or pencils to achieve the results you want. Before you begin, here are a few tips:

- Work with prints that are at least 15 percent lighter than normal.
- Natural-looking skin tones are easier to reproduce if prints are toned with KODAK PROFESSIONAL Sepia Toner (CAT 169 1757) or KODAK PROFESSIONAL Brown Toner (CAT 146 4452).
- Color lighter tones first (i.e. fair skin) as a guide for darker tones.

You'll need the following materials:

- Color media
- White, non-porous palette (palette with "wells" for holding liquid dyes)
- Applicators—sable brushes, cotton swabs, loose natural cotton, toothpicks, wooden skewers, paper towels
- Removers—kneaded rubber erasers, 5-percent clear, pure household ammonia
- Spray lacquer
- Steam source (for setting dry dyes)

Transparent Oils

Transparent oils, such as MARSHALL's Photo Oils, can help you achieve a broad range of results. They are easy to apply and remove, allow print details to show through, and are made specifically for use on photographic surfaces.

- Wipe the print with a cotton tuft moistened in MARSHALL's P.M. Solution or equivalent.
- Dry the print with a clean tuft.
- Apply small amounts of color with a cotton tuft or swab, using a circular motion.
- Rub the color to a thin, even layer with clean cotton.
- Remove any stray color using MARSHALL's P.M. Solution or a kneaded rubber eraser.
- Clean out the highlights with a dry cotton swab to give the colored areas more definition.
- Buff the highlight edges with cotton.
- When the print is completely dry, spray several light, even coats of a photographic lacquer over the finished print.

Liquid Retouching Dyes

Liquid retouching dyes, such as those in the KODAK Liquid Retouching Color Set (CAT 190 1743), are useful for achieving brilliant hues in small areas.

- Use distilled water to premoisten large areas that you plan to color. For small areas, apply dye using controlled brush strokes or a stippling action. For larger areas, dilute dyes with distilled water, and use a "wash" or watercolor technique.
- Remove liquid dye by wiping it with 5-percent clear ammonia, followed by distilled water.
- Apply a final coat of lacquer (optional).

Dry Dyes

Dry dyes, such as KODAK Retouching Colors (CAT 189 0888), are well suited for coloring large areas and achieving subtle, pastel tones.

- Dry the print thoroughly with a hair dryer to remove any residual moisture.
- Soften the dye cake by breathing on the cake of dye. *Do not use water to soften the cake.*
- Buff the colored area with clean cotton until the color is smooth and even.
- Pick up dye from the cake and apply with a cotton tuft, working in a circular motion, and covering the area completely.
- For more definition, remove color from the highlights using cotton and Remover for KODAK Retouching Colors (CAT 194 6730).
- Buff to blend the edges.
- To set the color, hold the print 6 to 8 inches from a steam source for 10 seconds, or until the waxy appearance disappears.
- Remove unwanted dye before steaming with Remover for KODAK Retouching Colors. Remove it after steaming with 5 percent clear ammonia.
- Apply a final coat of lacquer (optional).

Other Coloring Options

There are many color media options, each with a different level of colorfastness and ease of use. The following are just a few suggestions. Experiment, and see what suits your style and subjects best. Use your imagination.

- Pastels—for soft-looking, large-area applications
- Opaque oils and acrylics—for a brush-painted look
- Pencils—for small details
- Felt-tipped markers—for selective color and bold graphics
- Oil sticks—for the combined qualities of opaque oils and pastels
- Airbrush—for even color with good control
- Watercolors—for delicate, luminous color
- Food dyes and natural plant dye—for effective, inexpensive color
- Artists inks—for a wide range of strong colors

Lacquering and Laminating

Use lacquers with caution. If you choose to lacquer your prints, select a lacquer that is specifically intended for photographic applications.

Apply multiple light coats rather than a single thick coat of lacquer. Never allow a lacquered print to come into contact with the glass in a picture frame, because it may stick to the glass.

Laminating is really a variation on lacquering. Instead of a very thin polymer layer, laminating produces a much thicker layer. Laminates may contain UV absorbers, plasticizers, and matting agents. They provide protection against fungus and bacterial attack, moisture and dirt in the air, and physical abrasion.

Mounting

Mounting provides rigidity, helps prevent wrinkling, and gives some physical protection to prints.

For long-term keeping, it is best not to use adhesives or dry-mounting tissue. The best mounting method is to use plastic corners or hinge the print by using Japanese rice paper and water-soluble wheat paste. Do not use rubber cement, contact cement, or animal glue. If you must use a liquid adhesive, use starch paste or polyvinyl chloride.

If you choose to dry-mount your prints, use acid-free, pH-buffered, conservation-quality mounting board and conservation-quality mounting tissue.

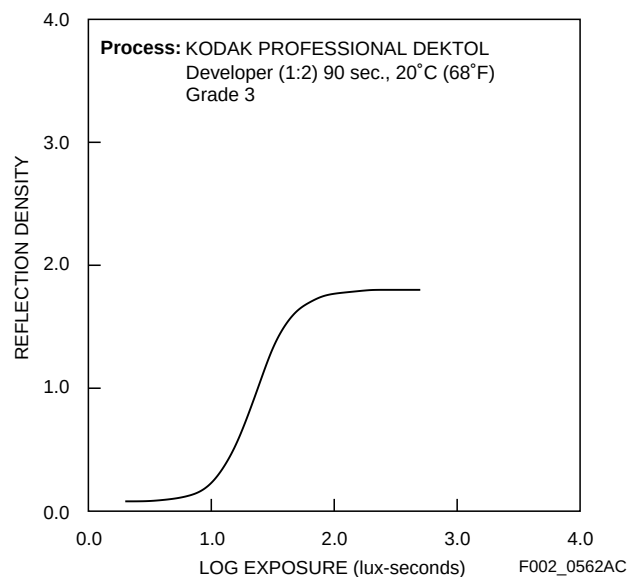
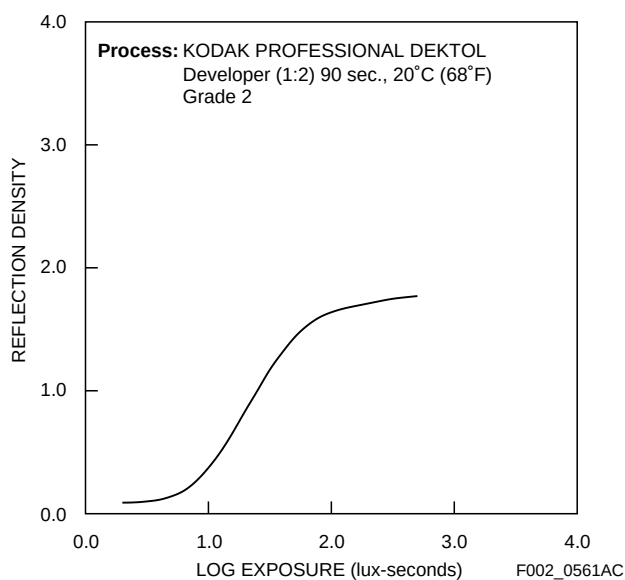
An overmat, or window mat, will help protect a print from abrasion, keep the emulsion away from the glass in a frame, and provide a neutral or complementary field. Be sure to use conservation-quality mat boards and backing and non-reactive framing materials.

For more information on laminating, lacquering, and mounting, see KODAK Publication No. E-67, *Finishing Prints on KODAK Water-Resistant Papers*, or No. F-35, *Protecting and Displaying Black-and-White Prints*.

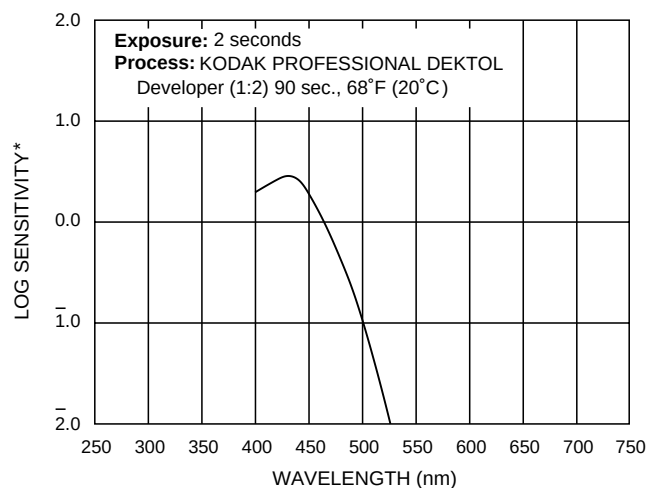
Note: Mounting glossy RC prints with dry-mounting tissue can introduce an “orange peel” effect.

CURVES

Characteristic Curve



Spectral-Sensitivity Curve



*Sensitivity = reciprocal of exposure (erg/cm^2) 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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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-30	<i>Storage and Care of KODAK Photographic Materials—Before and After Processing</i>
E-67	<i>Finishing Prints on KODAK Water-Resistant Papers</i>
E103BP	<i>KODAK PROFESSIONAL Black-and-White Papers Matrix</i>
E103CP	<i>Chemicals for KODAK PROFESSIONAL Black-and-White Papers Matrix</i>
F-2	<i>Pathways to Black and White</i>
F-35	<i>Protecting and Displaying Black-and-White Prints</i>
G-23	<i>Toning KODAK Black-and-White Materials</i>
J-5	<i>KODAK PROFESSIONAL POLYMAX T Developer and KODAK POLYMAX T Fixer</i>
K-4	<i>How Safe Is Your Safelight?</i>

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 PROFESSIONAL P-MAX Art RC Paper 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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KODAK PROFESSIONAL P-MAX
Art RC Paper
KODAK Publication No. G-28
CAT 165 5516

Minor Revision10-04
Printed in U.S.A.