

KODAK PROFESSIONAL Digital Black & White Paper



Discontinuance of KODAK PROFESSIONAL Black & White Photographic Paper

Due to the ongoing transition to digital output technologies in both professional and educational markets, Kodak has announced manufacturing discontinuance of Black & White Photographic Papers. Sales will cease by the end of 2005.

KODAK Black & White Films and Black & White Processing Chemicals will continue to be produced.

The final availability of specific Black & White papers will vary based on type, size, configuration and surface. Please contact your normal supplier of KODAK PROFESSIONAL Products for the latest information.

This is a panchromatic, resin-coated paper specifically designed for making continuous-tone black-and-white prints directly from digital images in digital exposing systems. This paper is optimized to give the best panchromatic rendition with tri-color digital photographic systems from Durst, Cymbolic Sciences International, Polieletronica, and other manufacturers. It is designed to work with digitized color positives, color negatives, and black-and-white negatives.

PROFESSIONAL Digital Black & White Paper offers good emulsion consistency, display and post-process life, sharpness, and increased maximum density. It is optimized to give the best possible panchromatic tone rendition when you expose it in digital imaging systems.

FEATURES	BENEFITS
• Optimized spectral sensitivity for tri-color digital imaging systems	• Excellent tone reproduction from scanned color positives, color negatives, and black-and-white negatives
• Specially coated on back to accept ink	• Good writing surface for making automatic chop lines on back
• Resin-coated, water-resistant base	• Rapid processing, fast drying, and minimum curl
• Good emulsion uniformity	• More consistency within emulsions, and from emulsion to emulsion
	• Less time required for emulsion-crossover testing
• Good display and post-process life	• Long print and display life

BASE AND SURFACE CHARACTERISTICS

Symbol	Texture	Base Tint	Base Weight
D, Fine lustre	Smooth	White	Medium (9-mil)
F, Glossy	Smooth	White	Medium (9-mil)

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 quality changes. Rewrap unused paper in its original packaging (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.

DARKROOM RECOMMENDATIONS

Do *not* use a safelight. Handle this paper in total darkness. Be sure that your printing and processing darkrooms are lighttight. Carefully control stray light within your printing equipment and processor keypads.

EXPOSURE

Light Sources

This paper is designed primarily for use in digital exposing systems using laser engines.

Exposing Equipment

You can expose this paper in various types of digital enlargers and printers such as (but not limited to)—

- Durst Lambda Digital Laser Imagers
- Cymbolic Sciences International LightJet Series or Digital Image Recorders

Because of the nature of printing with digital writers, we cannot provide starting-point recommendations for all makes and models of equipment. We recommend that you follow your equipment manufacturer’s recommendations and test the paper to calibrate your printer for optimum results.

Note: This paper is *not* designed for optical printing. The paper *may* be suitable for some optical applications; however, it will not print at the same speed or with the same panchromatic rendition as materials designed for optical printing.

Equipment Calibration

For optimum results, follow your equipment manufacturer’s recommendations for calibrating your printing equipment.

For Durst Lambda Digital Laser Imagers, basic calibration starting values follow. The values are based on readings from a X-Rite DTP-36 Densitometer.

Calibration for KODAK PROFESSIONAL Digital Black & White Paper on a Durst Lambda Imager

D-max	Basic Calibration (starting values)	D-min
R = 199 G = 207 B = 207	C = 113.20 M = 0.00 Y = 19.60 D = 25.30	R =7.2 G = 6.4 B = 2.6

Procedure:

1. Adjust your black-and-white paper processor to develop a D-max of at least 2.18 density when this paper is pre-flashed to room light.

To make adjustments, increase the processing time. For example, if your development time is 15 seconds at 38°C (100°F), try increasing the time to 25 seconds.
2. The D-min (unexposed paper) should not be greater than 0.07.
3. For the Durst Lambda 130 Imager, use the points and the CMYD basic calibration values in the table above.
4. You may need to run test prints to obtain an optimum black-and-white print.

PROCESSING

Machine Processing

To process this paper, you can use roller-transport and continuous processors that use conventional developers. For mechanized processors we recommend the following:

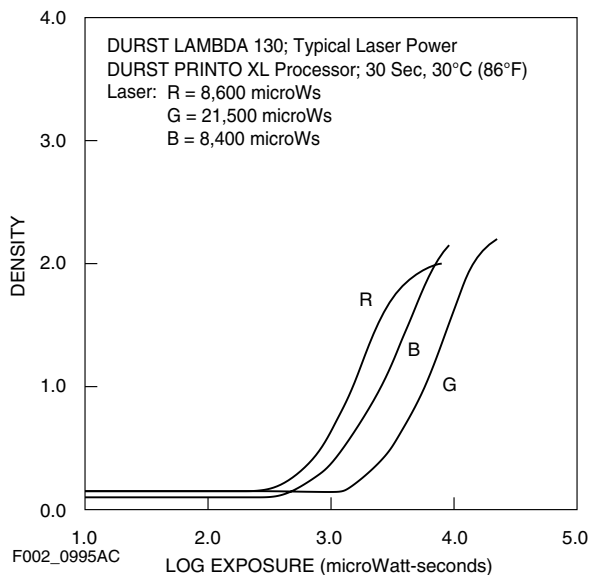
Processor	Developer	Fixer
Roller-Transport or Continuous	KODAK POLYMAX RT Developer and Replenisher	KODAK POLYMAX RT Fixer and Replenisher OR KODAK Rapid Fixer, Solution A

Starting Recommendation:

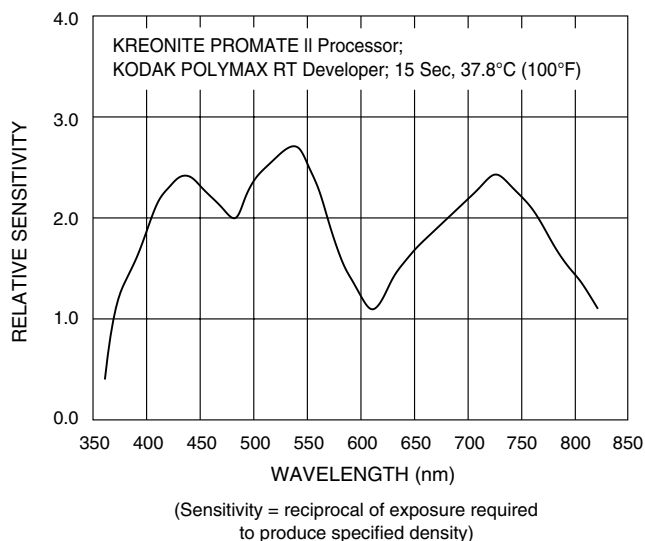
Use a development time of 25 seconds at 38°C (100°F), 30 seconds at 29°C (85°F), or twice your normal time.

CURVES

Characteristic Curves



Spectral-Sensitivity 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 dealers who sell Kodak products, or you can contact Kodak in your country for more information.

- E-30 *Storage and Care of KODAK Photographic Materials—Before and After Processing*
- E-2446 *KODAK PROFESSIONAL Digital III Color Paper*
- O-10 *Retouching Black-and-White Negatives and Prints*

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 Digital Black & White 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
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