

# KODAK Rapid-Dry Photographic Papers / 190 g

*KODAK Rapid-Dry Photographic Glossy Paper / 190 g*

*KODAK Rapid-Dry Photographic Satin Paper / 190 g*

## GENERAL DESCRIPTION

For photographic enlargements, indoor displays, proofing, exhibition displays, POP and retail graphics.

- Instant dry on any printer system for high speed workflows
- Excellent image quality and gamut before and after lamination
- Instant print to lamination provides shorter print run turnaround times
- Ideal for proofing applications with excellent short and long term color stability
- Universal dye and pigmented ink compatibility
- Performance guaranteed stability and durability for more than 20 years with pigments
- Thermal and cold laminate compatible
- Available in two finishes: glossy and satin

## COMPATIBILITY

When used with the following printers and inks, KODAK Rapid-Dry Photographic Papers are recommended for all applications if laminated/overcoated. Recommendations will provide optimal output when using printing paths commonly associated with each printer. These settings are intended as starting points — other combinations of settings may also provide good results. See "Printing Notes" for more information. "Yes" in the Laminate Recommendation column indicates that this media is likely to have good adhesion with laminates in that class.

For compatibility information for all KODAK Wide-Format Inkjet Media, refer to the Inkjet Media Compatibility Chart at [www.encad.com](http://www.encad.com).

Manufacturer	Model	Ink Compatibility		Laminate Recommendation (See Finishing Section)			
		Ink	Print Driver Media Setting	Heat Activated Thermal <sup>†</sup> 210-240°F (99-116°C)	Heat Activated Low Temperature <sup>*</sup> 185-195°F (85-91°C)	Heat Assisted 185-195°F (85-91°C)	Pressure Sensitive <sup>†</sup> 120°F (49°C)
HEWLETT-PACKARD DesignJet	800/1050C/ 1055CM	Dye <sup>‡§</sup>	High-Gloss Photo	Yes	Yes	Yes	Yes
HEWLETT-PACKARD DesignJet	2000/2500/ 2800/3000/ 3500/3800 CP	Dye <sup>‡</sup>	See Printing Notes	Yes	Yes	Yes	Yes
HEWLETT-PACKARD DesignJet	2000/2500/ 2800/3000/ 3500/3800 CP	UV	See Printing Notes	Yes	Yes	Yes	Yes
HEWLETT-PACKARD DesignJet	5000 Series	Dye <sup>‡</sup>	Productivity Photo Gloss	Yes	Yes	Yes	Yes
HEWLETT-PACKARD DesignJet	5000 Series	UV	Productivity Photo Gloss	Yes	Yes	Yes	Yes
ENCAD NovaJet	600/700 Series	GS <sup>‡</sup> , GS+ <sup>‡</sup> , GX <sup>‡</sup>	See Printing Notes	Yes	Yes	Yes	Yes
ENCAD NovaJet	800 Series	GS+ <sup>‡</sup> , GX <sup>‡</sup>	See Printing Notes	Yes	Yes	Yes	Yes

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Manufacturer	Model	Ink Compatibility		Laminate Recommendation (See Finishing Section)			
		Ink	Print Driver Media Setting	Heat Activated Thermal* 210-240°F (99-116°C)	Heat Activated Low Temperature* 185-195°F (85-91°C)	Heat Assisted 185-195°F (85-91°C)	Pressure Sensitive† Ambient to 120°F (49°C)
ENCAD NovaJet	1000i	Qi Dye‡	See Printing Notes; Printer Heater Setting: 2	Yes	Yes	Yes	Yes
ENCAD NovaJet	1000i	Qi Pigment	See Printing Notes; Printer Heater Setting: 2	Yes	Yes	Yes	Yes
COLORSPAN DisplayMaker	Hi-Res 8, Esprit/ Series XII	EC‡§	See Printing Notes	Yes	Yes	Yes	Yes
MUTOH Falcon	RJ-4100/ RJ-6100	Dye‡	See Printing Notes	Yes	Yes	Yes	Yes
MUTOH Falcon	RJ-4100/ RJ-6100	Pigment	See Printing Notes	Yes	Yes	Yes	Yes
ROLAND Hi-Fi Jet	Hi-Fi Jet FJ-50/ FJ-40, Hi-Fi Jet Pro FJ-400/FJ- 500/FJ-600	Dye‡§	See Printing Notes	Yes	Yes	Yes	Yes
ROLAND Hi-Fi Jet	Hi-Fi Jet FJ-50/ FJ-40, Hi-Fi Jet Pro FJ-400/FJ- 500/FJ-600	Pigment§	See Printing Notes	Yes	Yes	Yes	Yes
EPSON Stylus Pro	7000/9000 Series	Dye‡	<b>Photo Quality Inkjet Paper</b>	Yes	Yes	Yes	Yes
EPSON Stylus Pro	10000 Series	Photographic Dye‡	<b>Premium Luster Photo Paper</b>	Yes	Yes	Yes	Yes
EPSON Stylus Pro	7500/9500	Pigment	<b>Premium Luster Photo Paper</b>	Yes	Yes	Yes	Yes
EPSON Stylus Pro	7600/9600/ 10600	Ultra Chrome Pigment	<b>Premium Luster Photo Paper</b>	Yes	Yes	Yes	Yes
EPSON Stylus Pro	10000 Series	Archival Pigment	<b>Premium Luster Photo Paper</b>	Yes	Yes	Yes	Yes

\* Imaging-side lamination is not recommended for heat-activated laminates thicker than 3 mils, when printing with pigment-based inks. Additional total thickness and rigidity can be achieved by using thicker laminates on the non-imaging side.

† Do not use pressure-sensitive laminates with solvent-based adhesives.

‡ For optimal durability, laminate soon after printing (within 4 hours).

§ Based on our testing experience and knowledge of these Printer / Ink combinations, we expect that KODAK Rapid-Dry Photographic Papers are compatible, although they have not been extensively tested.

**Note:** Note: Rapid-Dry Photographic Papers are not recommended for use with dye inks unless laminated. If prints are laminated within 4 hours of printing to seal the image from exposure to air, the print lifetime can be extended—depending on the type of overlamine. See Finishing section for additional details.

## PRINTING NOTES

The Print driver media settings recommended in the Compatibility section are intended to provide usable results with available media profiles found in the printer manufacturer's provided drivers and RIPs. These recommendations will provide proper ink laydowns with no pooling or bleeding, and color which will be acceptable for many applications. It is suggested that tests be run using these recommendations and color corrections be made to meet user expectations.

In cases where no recommendation is made, choose the media setting closest to the KODAK Wide-Format Inkjet Media you are using. This should give you a print which requires little or no adjustment to get usable results.

## RIPs and Profiles for Encad and Other Printers

For more exacting color, several third party RIPs (Raster Image Processors) are available with profiles supporting Kodak media for Encad, Kodak and other printers. For more information visit Encad's website at [www.encad.com/Support/RIP-Support/index.asp](http://www.encad.com/Support/RIP-Support/index.asp)

Following is a list of software companies that provide RIPs for the Encad product line. To obtain profiles that are not available for download directly from Encad, as well as complete product descriptions and support, please visit the RIP company's website.

Encad	<a href="http://www.encad.com/Support/RIP-Support/index.asp">www.encad.com/Support/RIP-Support/index.asp</a>
Colorgate Photo RIP	<a href="http://www.colorgate.com/home_e/products_e.html">www.colorgate.com/home_e/products_e.html</a>
Best GmbH	<a href="http://www.bestcolor.com/bcint/index.htm">www.bestcolor.com/bcint/index.htm</a>
Scanvec Amiable	<a href="http://www.scanvecamiable.com">www.scanvecamiable.com</a>
Onyx Graphics	<a href="http://www.onyxgfx.com">www.onyxgfx.com</a>
AIT International	<a href="http://www.applied-image.com/Shiraz-RIP.htm">www.applied-image.com/Shiraz-RIP.htm</a>
Image Technologies	<a href="http://www.imagetechdev.com">www.imagetechdev.com</a>
Global Graphics	<a href="http://www.globalgraphics.com">www.globalgraphics.com</a>
Colorburst Systems	<a href="http://www.compatsys.com">www.compatsys.com</a>
Wasatch Computer Technology, Inc.	<a href="http://www.wasatchinc.com">www.wasatchinc.com</a>
CADlink Technology	<a href="http://www.cadlink.com">www.cadlink.com</a>
JET RIP	<a href="http://www.jangeun.co.kr">www.jangeun.co.kr</a>

## Custom Profiles

While the above printing recommendations and available profiles from Encad will provide adequate results for many wide-format inkjet applications, there are applications, such as inkjet proofing, which demand more exacting color requirements. It is suggested that for these applications, custom profiles be built for given ink/media/printer combinations. Many color management and profile building software applications are available which allow the user to manage color to meet their needs. Also, many RIPs will provide color profiling options which allow the user to control the color of their output. Please contact your dealer or Encad technical support for help determining the best solution for your application.

## HANDLING

All inkjet media must be handled with care before and after printing to prevent damage to the ink receiving layer and printed images. Use the following guidelines, your experience, and common sense for the proper care of your media.

- Store unused media in its original packaging, using the core-plugs and plastic sleeves.
- Allow media to acclimate to your environmental conditions for at least 24 hours before use.
- Kodak Inkjet media is rolled printable side out. Avoid touching the printable side by handling by the edges of the roll.
- Wear cotton gloves when handling media to avoid scratches, abrasions and fingerprints from moisture and oils on your hands.
- Do not allow the media to come into contact with moisture. Moisture will damage many types of inkjet medias before and after printing.
- Avoid handling, trimming, laminating or other finishing until prints are completely dry. Dry times will vary based on media type, ink type and environmental conditions.
- Do not fold, bend or crease media or damage may occur to the ink receiving layer.
- Do not allow the surface of the media to come into contact with itself or another inkjet media.
- Use media only in recommended operating conditions—see "Physical Characteristics" section.

## Curl

Most types of roll-based inkjet media will exhibit some amount of curl, either toward the base side or toward the print side. This will vary based on media type and environmental conditions. Some media will curl more in low humidity environments and others in high humidity environments. Also, media may curl more towards the core or end of the roll due to "roll memory."

Although curl is mainly an issue when printing, it can also have an impact on laminating and other finishing procedures. Follow these guidelines, and use your experience and common sense to avoid issues caused by curl.

### When printing:

- Advance media several inches past the print platen before starting a print job.
- Add weights or clips to the leading edge of the media.
- Attach media to the printer's take-up spool before starting printing.
- Adjust vacuum settings accordingly on printers equipped with variable media vacuum settings.
- Adjust heater and dryer settings on equipped printers to obtain optimum conditions to ensure flat media. See printer owners' manual for their recommendations.

### During finishing:

- Reverse wind media, when completely dry, to counteract roll memory.
- Do not allow media to remain rolled for extended periods of time.
- Rough cut prints and lay them flat before laminating.

## FINISHING

Detailed information and tips can be found in Kodak publication E-2600, *Laminating, Mounting, and Finishing KODAK Wide-Format Inkjet Media*.

### Lamination

Please refer to lamination chart in compatibility sections above for specific printer/ink/laminate recommendations.

#### Lamination Definitions

<b>Heat Activated Thermal, 210-240°F (99-116°C)*</b>	Polyester laminates applied with hot roll laminators at 210-240°F.
<b>Heat Activated Low Temperature, 185-195°F (85-91°C)*</b>	Polyester laminates applied with hot roll laminators at 185-195°F.
<b>Heat Assisted, 185-195°F (85-91°C)</b>	Polyester or vinyl laminates with pressure sensitive adhesives; specially formulated for inkjet prints, and applied with hot roll laminators at 185-195°F.
<b>Pressure Sensitive, Ambient to 120°F (49°C)</b>	Polyester or vinyl laminates with pressure sensitive adhesives on a release liner, applied at ambient conditions or at low temperature, 100-120°F.

\* For both Heat Activated Thermal and Low Temperature, use a laminate with a total thickness (polyester and adhesive) of 3 mils or less on the face side. Thicker laminates may be applied to the back of the print for increased total thickness.

### Prints must be laminated prior to display to ensure optimum performance and guard against dye fade due to environmental pollutants.

Successful lamination requires that inkjet media be completely dry to ensure good adhesion and to avoid unwanted color shifts. While prints may feel dry to the touch, components of the ink that prevent good adhesion or may cause the color to change may still be present. The best drying is achieved while prints are exposed to air, not stacked or on a roll. For best results, use inkjet-specific laminate products.

For increased durability, choose a laminate with UV protection and encapsulate with a 1/4-1/2" (6.5-13 mm) seal around the edges of a print to prevent moisture and other airborne pollutants from reaching the image. Heavier weight papers may require a wider edge seal.

### Mounting

Prints can be mounted, laminated or not, to a variety of materials, including poster board, foam board, Sintra, Lexan and more. Use inkjet-specific adhesive materials and follow the manufacturer's instructions.

## PERFORMANCE GUARANTEE

Encad will guarantee prints from compatible systems against noticeable fading, cracking, yellowing, and bleeding when the print is viewed from its intended viewing distance.

The Indoor Performance Guarantee durations will vary based on the media/printer/ink system. The stated durations assume the media is displayed indoors under fluorescent light (average intensity 450-lux, 12 hours/day), and/or with indirect sunlight exposure (at least 6 feet from a window, with no direct sunlight). The guarantee covers both laminated or unlaminated prints as noted in the table below. The unlaminated guarantee assumes the media will be displayed in a typical office environment and will not be exposed to a high level of pollutants (above a typical ozone level for an office environment).

Terms, conditions and additional information about the Performance Guarantee can be found at [www.encad.com](http://www.encad.com).

Manufacturer	Model	Ink	Durability
HEWLETT-PACKARD DesignJet	5000 Series	6 Color Dye	8 years laminated
		6 Color UV	>20 years >27 years laminated (ongoing)
	2xxx/3xxx	4 Color Dye	6 years laminated
		4 Color UV	>20 years >27 years laminated (ongoing)
ENCAD NovaJet	800, 700, 600, 500 Series	4/8 Color GS+	3 years laminated
		4/8 Color GX	>3 years laminated (ongoing)
	1000i	Qi Dye	>9 years laminated (ongoing)
		Qi Pigment	>20 years >27 years laminated (ongoing)
EPSON Stylus Pro	7000/9000	6 Color Dye	2 years laminated
	7600/9600/10000/10600	6 Color Photographic Dye	3 years laminated
	9500	6 Color Pigment	>20 years >27 years laminated (ongoing)
	10000/10600	6 Color Archival Pigment	>20 years >27 years laminated (ongoing)
	7600/9600/10600	6 Color Ultra Chrome Pigment	>20 years >27 years laminated (ongoing)

## Additional Durability Information

The following table can be used as a guide for printers and inks not included in the Performance Guarantee.

### Durability Guidelines for Printers Not Included in Performance Guarantee

If Using	Expect Durability Similar To:
Colorspan EC	Encad GX
Roland Dye	Epson 9000 Dye
Roland Pigment	Epson 9500 Pigment
Mutoh Dye	Epson 9000 Dye
Mutoh Pigment	Epson 9500 Pigment

**KODAK Rapid-Dry Photographic Papers / 190 g**
**ORDERING INFORMATION**
**KODAK Rapid-Dry Photographic Glossy Paper / 190 g**

Roll Length	Roll Width / Order No.				
	24 in. (61 cm)	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
100 ft (30.5 m)	222730-00	222731-00	222732-00	222733-00	222734-00
16.4 ft (5 m) (sample)	222735-00	NA	NA	NA	NA

**KODAK Rapid-Dry Photographic Satin Paper / 190 g**

Roll Length	Roll Width / Order No.				
	24 in. (61 cm)	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
100 ft (30.5 m)	222737-00	222738-00	222739-00	222740-00	222741-00
16.4 ft (5 m) (sample)	222742-00	NA	NA	NA	NA

NA = Not available

**PHYSICAL CHARACTERISTICS**

Physical Characteristics	Glossy / 190 g	Satin / 190 g	Test Method Reference
Caliper	7 mil (191 µm)		ISO 534
Opacity	>90		Tappi T 524
CIE Whiteness	107		Tappi T 524
Weight	190 g/sm		ISO 536
Brightness	>90		Tappi T 524
60-degree Gloss	40	20	ISO 7668
L*(D65/10 uvi/BBW)	96		Tappi T 524
Flame Spread Classification	Class A		ASTM E84
Operating Conditions	59-86°F (15-30°C), 30-70% RH (non-condensing)		
Recommended Storage Conditions	68°F (20°C), 50% RH		

If you have questions or need assistance, visit Encad's website at [www.encad.com](http://www.encad.com) or, in the U.S., contact Encad Technical Support at 1-877-362-2387.

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