

TECHNICAL DATA / WIDE-FORMAT INKJET MEDIA

July 2004 • E-2633

KODAK Poly Poster, Glossy Plus / 8 mil and KODAK Poly Poster, Satin Plus / 8 mil

GENERAL DESCRIPTION

Ideal for low-cost, photo-realistic graphics, including murals, point of purchase displays, signs, banners, and charts.

- Flexible, tear-resistant polypropylene 8-mil film base
- · Glossy and satin surfaces for a wide variety of viewing conditions
- · Great durability at low cost

COMPATIBILITY

When used with the following printers and inks, KODAK Poly Poster, Glossy Plus / 8 mil and KODAK Poly Poster, Satin Plus / 8 mil are recommended for all applications. 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.

| | | Ink Compatibility | | Laminate Recommendation (See Finishing Section) | | | |
|----------------------------------|--|---|---|---|--|--|--|
| Manufacturer Mo | Model | 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) |
| KODAK PROFESSIONAL | 4000 Series | Lightfast Plus Dye (4 color only) | See Printing Notes (1x4 and 2x4 only) | No | No | No | Yes |
| ENCAD NovaJet | 500/600/700/ 800 | GS, GS+ Dye | See Printing Notes | No | No | No | Yes |
| ENCAD NovaJet | 500/600/700/ 800 | GX Dye (4 color only) | See Printing Notes (1x4 and 2x4 only) | No | No | No | Yes |
| ENCAD NovaJet | 1000i | Qi Dye | See Printing Notes; Printer Heater Setting: 2 | No | No | No | Yes |
| HEWLETT- PACKARD DesignJet | 800/1050C/ 1055CM | Dye | Coated Paper | No | No | No | Yes |
| HEWLETT- PACKARD DesignJet | 2000/2500/ 2800/3000/ 3500/3800 CP | Dye | High-Gloss Photo | No | No | No | Yes |
| HEWLETT- PACKARD DesignJet | 5000/5500 | Dye | Photo Imaging Gloss | No | No | No | Yes |
| HEWLETT- PACKARD DesignJet | 5000/5500 | UV | HW Coated Paper | No | No | No | Yes |
| COLORSPAN Displaymaker | Hi-Res 8, Esprit/Series XII | EC (4 color only) | See Printing Notes | No | No | No | Yes |
| EPSON Stylus Pro | 7600/9600/ 10000/10600 | Photographic Dye | Photo Quality Inkjet Paper | No | No | No | Yes |

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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. For example, if you are printing on New KODAK Premium Photographic Glossy Paper / 180g, choose a setting in your driver or RIP which is intended for another glossy photo paper. 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 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 | www.encad.com/Support/RIP-Support/index.asp |
|-----------------------------------|--|
| Colorgate Photo RIP | www.colorgate.com/home_e/ products_e.html |
| Best GmbH | www.bestcolor.com/bcint/index.htm |
| Scanvec Amiable | www.scanvecamiable.com |
| Onyx Graphics | www.onyxgfx.com |
| AIT International | www.applied-image.com/ Shiraz-RIP.htm |
| Image Technologies | www.imagetechdev.com |
| Global Graphics | www.globalgraphics.com |
| Colorburst Systems | www.compatsys.com |
| Wasatch Computer Technology, Inc. | www.wasatchinc.com |
| CADlink Technology | www.cadlink.com |
| JET RIP | www.jangeun.co.kr |

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.

Encad Printers with GX 8-Color Inkset

There is a compatibility problem with the KODAK Poly Poster, Glossy and Satin / 7 mil and the 8-color GX inkset that can make images go green (depending on image content). Therefore we do *not* recommend this combination. Printing with the GX 4-color inkset is fine.

Hewlett-Packard Printers

In low humidity environments many types of film based media will show static marks when printed on HP Designjet 5000 series printers. These marks, which appear as low density ink blotches aligned with the bottom rubber rollers, are noticeable in areas which are intended to be white and are next to high density areas, such as large black text. The marks are not present within image areas. To help reduce or eliminate these static marks, try one or all of the following suggestions:

- Operate the printer in a higher humidity environment or place a humidifier near the printer. The static marks will virtually disappear as the humidity is higher, at about 45% RH or higher.
- Print at slower speeds. This will cause less static buildup and make the marks less noticeable.
- Add a 1% or higher fill color for CMYK in white areas; the exact amount to be determined by testing in your working environment. It has been demonstrated in a 30% RH environment that filling white areas with a 1% dot for all 4 channels, C, M, Y, and K, will virtually remove the marks. The resulting light gray in white areas is not objectionable, especially when prints are trimmed so that no unprinted media is visible as a reference. The fill color can be added in the application that the file was created in or within your RIP software. In ONYX Postershop, simply use the "Replace Color" tool, select white, and add 1% to all 4 colors.



Caution

When using film based medias on printers in very low humidity conditions, 30% or lower, static charges may be enough to damage your printer. It is not recommended that you print in these conditions. Be sure to follow your printer manufacturers guidelines for operating conditions, which are especially critical when using film based medias.



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." KODAK Poly Posters will exhibit some "roll memory" curl, which is typical of polypropylene based medias.

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

Refer to "Laminate Compatibility" in the Compatibility section for specific printer/ink/laminate/recommendations.

Lamination Definitions

| Heat Activated Thermal, 210-240°F (99-116°C)* | Polyester laminates applied with hot roll laminators at 210-240°F. |
|---|--|
| Heat Activated Low Temperature, 185-195°F (85-91°C)* | Polyester laminates applied with hot roll laminators at 185-195°F. |
| Heat Assisted, 185-195°F (85-91°C) | Polyester or vinyl laminates with pressure sensitive adhesives; specially formulated for inkjet prints, and applied with hot roll laminators at 185-195°F. |
| Pressure Sensitive, Ambient to 120°F (49°C) | 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.

Producing Indoor Banners

KODAK Poly Poster Plus medias are excellent choices for producing indoor banners. The durable polypropylene base is excellent for adding grommets and can be folded with no damage to the surface coating. When adding grommets, added strength can be achieved by applying the grommets through several layers. Folding the media on all sides will provide a natural and easy way of creating a thickness of 4 layers, which will ensure excellent durability for grommets.



PERFORMANCE GUARANTEE

Indoor Applications (Fluorescent Display)

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.

| Manufacturer | Model | Ink | Durability |
|----------------------------|------------------------------|------------------|------------|
| HEWLETT-PACKARD DesignJet | 2000/3000/5000 Series | 4/6 Color Dye | 2 years |
| HEWLET I-FACKAND Designoet | 5000 Series | 6 Color UV | 2 years |
| | 800, 700, 600, 500 Series | 4/8 Color GS+ | 2 years |
| ENCAD NovaJet | 800, 700, 600, 500 Series | 4 Color GX | 2 years |
| | 1000i | Qi Dye | 2 years |
| EPSON Stylus Pro | 7600/9600/10000/10600 Series | Photographic Dye | 3 months |

Outdoor Applications

Outdoor exposure, including exposure to ultraviolet radiation, moisture, oxidation, and chemical pollutants all influence the final outdoor longevity of a graphic image. Encad guarantees that the effects of those exposures will not affect the quality and suitability of the graphic image print, based on accepted industry test standards, for advertising purposes and other customary outdoor display uses. Specifically, Encad guarantees prints from the systems below against excessive fading, peeling, cracking, yellowing, bleeding, and running for the periods stated below.

Terms, conditions and additional information about the Performance Guarantee can be found at www.encad.com.

| Manufacturer | Model | Ink | Durability |
|------------------------------|-------------|------------|--------------------|
| HEWLETT-PACKARD DesignJet | 5000 Series | 6 Color UV | 6 months laminated |

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: |
|--------------------------------|-------------------------------|
| KODAK Lightfast Plus Dye (1x4) | Encad GX |
| Colorspan EC Dye (1x4) | Encad GX |

ORDERING INFORMATION

KODAK Poly Poster, Glossy Plus / 8 mil

| Roll | Roll Width / Order No. | | | |
|---------------------------|------------------------|-------------------|-----------------|-------------------|
| Length | 36 in. (91.4 cm) | 42 in. (106.7 cm) | 50 in. (127 cm) | 60 in. (152.4 cm) |
| 100 ft (30.5 m) | 222540-00 | 222541-00 | 222542-00 | 222543-00 |
| 200 ft (61 m) | 222545-00 | NA | NA | NA |
| 16.4 ft (5 m) (sample) | 222544-00 | NA | NA | NA |



KODAK Poly Poster, Glossy Plus / 8 mil and KODAK Poly Poster, Satin Plus / 8 mil

KODAK Poly Poster, Satin Plus/ 8 mil

| Roll | Roll Width / Order No. | | | |
|---------------------------|------------------------|-------------------|-----------------|-------------------|
| Length | 36 in. (91.4 cm) | 42 in. (106.7 cm) | 50 in. (127 cm) | 60 in. (152.4 cm) |
| 100 ft (30.5 m) | 222547-00 | 222548-00 | 222549-00 | 222550-00 |
| 200 ft (61 m) | 222552-00 | NA | NA | NA |
| 16.4 ft (5 m) (sample) | 222551-00 | NA | NA | NA |

NA = Not available

PHYSICAL CHARACTERISTICS

| Physical Characteristics | Value | Test Method Reference |
|-----------------------------------|---|-----------------------|
| Caliper | 8 mil (203 μm) | ISO 534 |
| Opacity | >95 | Tappi T 524 |
| CIE Whiteness | 218 | Tappi T 524 |
| Weight | 142 g/sm | ISO 536 |
| Brightness | 117 | Tappi T 524 |
| 60-degree Gloss | >80 Glossy <10 Satin | ISO 7668 |
| L*(D65/10 uvi/BBW) | 99 | Tappi T 524 |
| Operating Conditions | 59-86°F (15-30°C), 20-70% 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, or in the U.S. contact Encad Technical Support at 1-877-362-2387.

The contents of this publication are subject to change without notice.



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