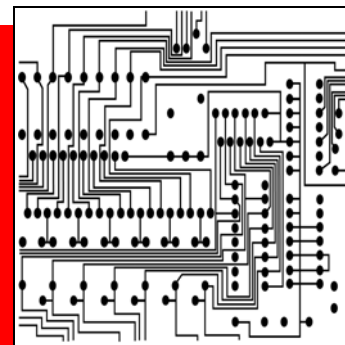


KODAK PRECISION LINE Duplicating Film UDA7

—High Complexity PCB Starts With the Right Phototools—



July 2004 • TI-2036

- A high-contrast duplicating film that can be handled in white fluorescent roomlight illumination filtered with ultraviolet absorbing material, or in yellow fluorescent illumination.
- Recommended for making high density duplicates from a wide range of original line or halftone materials.
- Designed for general contacting applications, and can be exposed in all orientations, either to the emulsion or though the base. Excellent for making sharp, uniform spreads and chokes.
- Capable of providing very low D-min under a wide exposure range.
- Emulsion and base sides are sufficiently matte to minimize Newton's rings and provide rapid drawdown time in vacuum printing frames.
- Coated on dimensionally stable ESTAR Thick Base with antistatic properties which are very evident under a wide range of humidity conditions, both before and after processing. These antistatic properties minimize dust and dirt attraction to the film.
- Excellent scratch and abrasion resistant overcoat.
- Can be processed in a wide selection of machine and tray developers, including conventional lith, rapid-access, and KODAK ULTRALINE Developer and Replenisher.

SUPPORT

Dimensionally stable support.

7-mil (0.18 mm)	ESTAR Thick Base
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DARKROOM RECOMMENDATIONS

This film can be safely handled for up to a total of 60 minutes, before or after exposure, in up to 40 footcandles (430 lux) of roomlight illumination substantially free of ultraviolet (UV) energy. Such illumination is supplied by yellow fluorescent lamps (warm white preferred) and white fluorescent lamps covered by UV-absorbing or modified by UV-absorbing plastic diffusers. Other roomlight sources contain varying amounts of UV energy, and their roomlight tolerances for this film should be tested under the specific conditions of use.

STORAGE AND HANDLING

Keep unexposed film and processed film in a cool, dry place. Process film as soon as possible after exposure.



EXPOSURE

Expose with a multi-level high-intensity metal-halide exposure source. Optimum exposure should be determined by means of a trial exposure series, following the equipment manufacturer's recommended procedures. Use a trial exposure time of 5 to 20 seconds at an exposure distance of 36 to 60 inches. Contact your Kodak representative for more information.

Note: Exposures for optimum line width reproduction are critical when using a broad light source, and when making base-to-emulsion exposures. Any light falloff from the center to the edge of the exposing source may affect overall reproduction quality and introduce problems with accurate line-width reproductions.

Precautionary: Contact the manufacturer of high intensity ultraviolet lamps for safety information pertaining to ultraviolet radiation and ventilation requirements due to ozone generation.

RECIPROCITY

With recommended processing, the reciprocity speed change is negligible (1/3-photographic stop or less) within exposure range of 1/1000 second to 100 seconds; there is no change in contrast.

PROCESSING

Notice: Observe precautionary information on product labels and on the Material Safety Data Sheets.

Use KODAK ACCUMAX Rapid Access Developer and Replenisher (diluted 1:2) and KODAK Rapid Fixer and Replenisher (diluted 1:3). Do not use any type of hardener in the fixer.

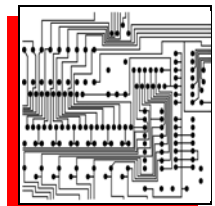
	Size	CAT No.
KODAK ACCUMAX Rapid Access Developer and Replenisher	5 L concentrate	887 5569
KODAK Rapid Fixer and Replenisher	5 L concentrate	174 9839

Recommended Starting Points:

Developer Temperature	Time (Seconds)
ACCUMAX Developer	
38°C (100°F)	30 seconds
35°C (95°F)	45 seconds
32°C (90°F)	60 seconds
RA 2000 Developer Repro Developer (Liquid)	
35°C (95°F)	30 seconds
32°C (90°F)	45 seconds

Replenishment Rates:

Developer	Fixer
465 mL / sq m (0.30 mL / sq in.)	465 mL / sq m (0.35 mL / sq in.)



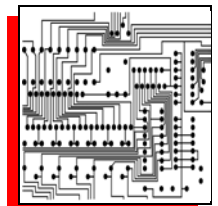
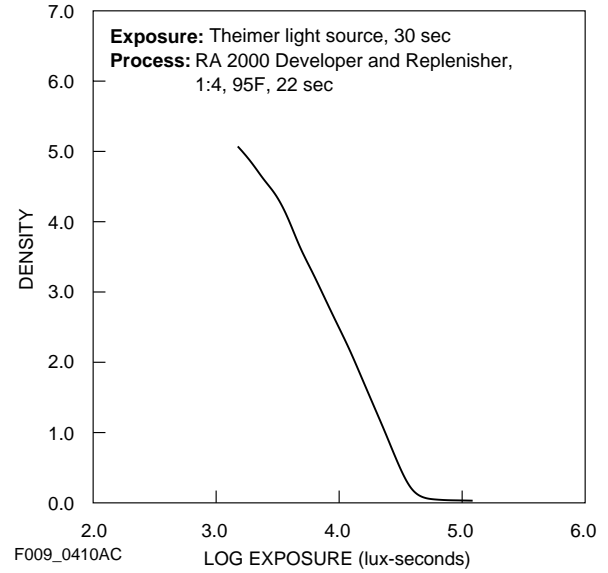
DIMENSIONAL STABILITY

Dimensional stability is an all-inclusive term. In photography, it applies to size changes caused by changes in humidity and in temperature, and by processing and aging. The dimensional properties of ESTAR Base may vary slightly in different directions within a sheet; the differences that may exist, however, are not always equal between the length and width directions.

Differences in size change between length and width directions should be within 10 percent of each other.

CURVES

Characteristic Curve



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MORE INFORMATION

For the latest version of technical support publications for Kodak products, visit Kodak on-line at:
<http://www.kodak.com/go/PCBproducts>

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)

From outside the US/Canada: 1-716-724-4000

Note: The Kodak materials described in this publication for use with UDA7 Film are available from dealers who supply KODAK Products. You can use other materials, but you may not obtain similar results.

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.

Industrial Imaging
EASTMAN KODAK COMPANY • ROCHESTER, NY 14650

