TI2104 Revised 7-01

KODAK EL Camera Film

Features / Customer Product Specifications

- A high contrast, stabilized gelatin, orthochromatic film for making camera-line or copy-dot negatives or positives.
- High maximum density.
- Can also be used for making contact negatives and positives.
- Matte level sufficient to permit quick and uniform vacuum drawdown.
- Good reciprocity and latent image keeping characteristics.
- Product can be used in most conventional rapid-access developers such as KODAK RA 2000 Developer and Replenisher.
- Dimensionally stable ESTAR Base.

Safelight Recommendations

Use a KODAK 1A Safelight Filter / light red in a suitable safelight lamp equipped with a 15-watt bulb. Keep the film at least 4 feet (1.2 metres) from the safelight.

Storage

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

Exposure

RELATIVE EXPOSURE INDEX

Orientation	System	Pulsed-Xenon	Tungsten or Quartz-Halogen
Emulsion Exposure	ISO/ASA System	5	4
	ISO/DIN System	8	7
Exposed through base	ISO/ASA System	2	2
	ISO/DIN System	5	3

These indexes are provided primarily as indicators of the relative speed of this film when compared with other Kodak graphic arts materials when processed in lith developers.

The pulsed-xenon value indicates the film's relative speed to pulsed-xenon illumination as measured by a light integrator. Index numbers for the other light sources can be used with photoelectric exposure meters to help establish trial exposures.

One camera stop increase is indicated in the ASA System by doubling the index number and in the DIN System by increasing the number by three.

EXAMPLES OF CAMERA EXPOSURES:

Camera-Line- For lith developers:

For a same-size (1:1) line reproduction with two 1500-watt pulsed-xenon lamps in reflectors about 3 feet (0.9 metre) from the center of the copyboard, expose for about:

15 seconds at f/22 (exposure to the emulsion)

30 seconds at f/22 (exposure to the base)

Contact- Processable in lith developers:

Starting-point examples of exposure are given below when using a modified KODAK Adjustable Safelight Lamp, or equivalent. Set the lamp at 16 volts at a distance of 5 feet (1.5 metres) from the exposure plane—approximately 4 footcandles (43 lumens per square metre).

To emulsion:	5 to 15 seconds[1]
Through base:	10 to 30 seconds[1]

[1] With a KODAK WRATTEN Neutral Density Filter No. 96 (0.9).

FILTER FACTORS

When a filter is used, multiply the unfiltered exposure by the filter factor for the particular filter shown below. Since lighting conditions vary, these factors are only approximate:

		KODAK WRATTEN Gelatin Filter No.			
Orientation	**Light Source**	**8**	**15**	**47B**	**58**
To the emulsion	Pulsed-Xenon	2.0	3.5	12.0	4.0
	Tungsten or Quartz-Halogen	1.5	2.5	40.0	3.5

NOTE: It is recommended that the manufacturer of the pulsed-xenon or quartz-halogen lamps be consulted for safety information pertaining to ultraviolet radiation and ventilation requirements due to ozone generation.

Processing

NOTICE! Observe precautionary information on product labels and on Material Safety Data Sheets.

TRAY PROCESSING:

1. DEVELOP with continuous agitation at 68°F (20 °C).

Developer	Recommended Time (Minutes)	Useful Range [1](Minutes)
Rapid Access:		
KODAK D-11	1 1/2	1 to 4
KODAK RA 2000 (1:4)	1 1/2	1 to 4 1/2
KODAK RA 2001	1 1/2	1 to 3
Lith:		
KODALITH Super RT	2 1/2	1 3/4 to 2 3/4
KODALITH Liquid (1:3)	2	1 1/2 to 2 1/2

[1] Within this range of development times, satisfactory results can usually be obtained.

2. RINSE at 65 to 80° F (18 to 27° C) with agitation.

KODAK Indicator Stop Bath	10 seconds
or diluted 4% acetic acid solution	10 seconds

3. FIX at 65 to 80° F (18 to 27° C) with frequent agitation.

KODAK 3000 Fixer and Replenisher	1 to 2 minutes
KODAK Rapid Fixer	1 to 2 minutes
KODAK Fixer	2 to 4 minutes

4. WASH at 65 to 80° F (18 to 27° C) in running water for about 10 minutes.
5. DRY in a dust-free place.

MECHANIZED PROCESSING:

The recommended starting point for optimum results using KODALITH Blender Concentrates is:

Deep-Tank Processors 1 min 15 sec at 80° F (26.5°C)

The recommended starting point for optimum results using KODAK RA 2000 Developer and Replenisher (1:4) is:

Rapid Access Processors 30 seconds at 95°F (35°C)

Kodak Polychrome Graphics LLC
Norwalk, CT 06850
USA

End of Instruction Sheet

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1) Support

Dimensionally stable support:

4-mil (0.10 mm) ESTAR Base

2) 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 absence of solvent in ESTAR Base is one of the reasons why ESTAR Base films show excellent dimensional stability. 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 in both the length and width directions.

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

Determined in accordance with ISO Standard.

Thermal Coefficient of Linear Expansion:

Unprocessed or Processed	0.001 % per degree F
	0.0018 % per degree C

Humidity Coefficient of Linear Expansion:

Unprocessed	0.0016 % per % RH
Processed	0.0014 % per % RH

Processing Dimensional Change:
Dependent on drying conditions

3) 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.

4) Graphs[1]

Characteristic

A) KODAK RA 2000 Developer and Replenisher, 1:4 (9-94)
B) KODALITH Super RT Developer (9-94)

[1]NOTICE: While the data presented are typical of production coatings, they do not represent standards that must be met by Kodak Polychrome Graphics. Varying storage, exposure, and processing conditions will affect results. The company reserves the right to change and improve product characteristics at any time.

Spectral Sensitivity

C) KODAK RA 2000 Developer and Replenisher, 1:4 (9-94)

The products mentioned in this document may not be available in all regions or countries. If you have questions or need assistance, contact your local Kodak Polychrome Graphics representative or visit our website: www.kpgraphics.com.

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

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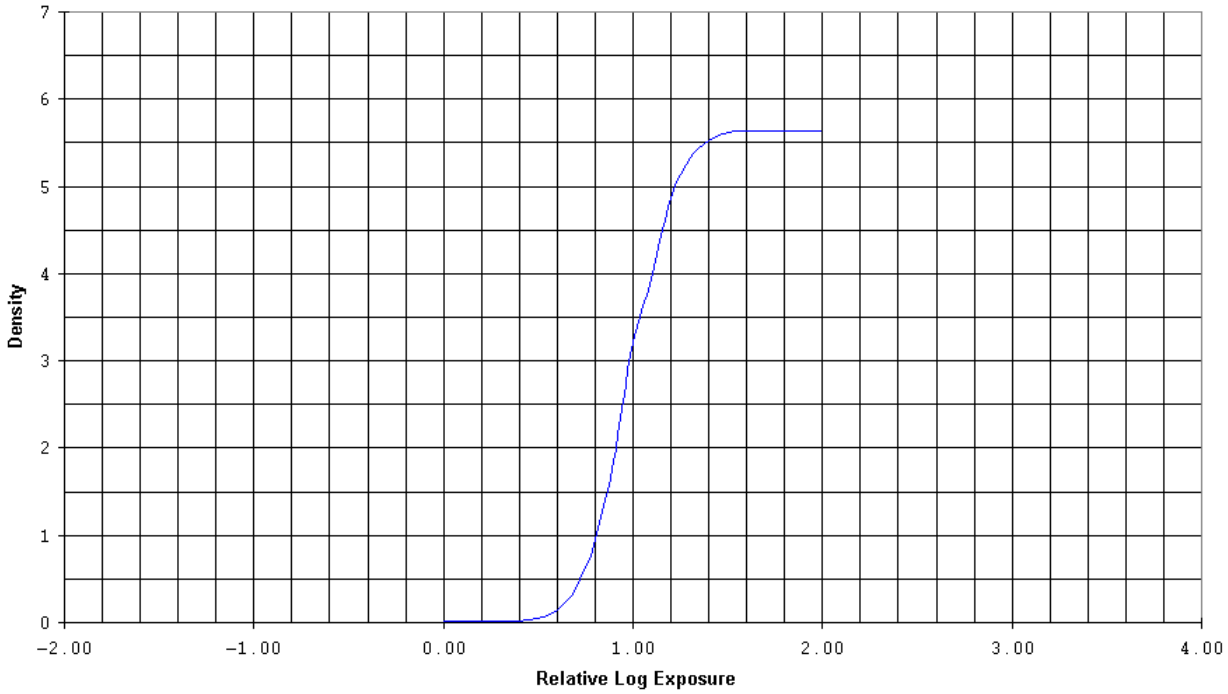
End of Data Sheet

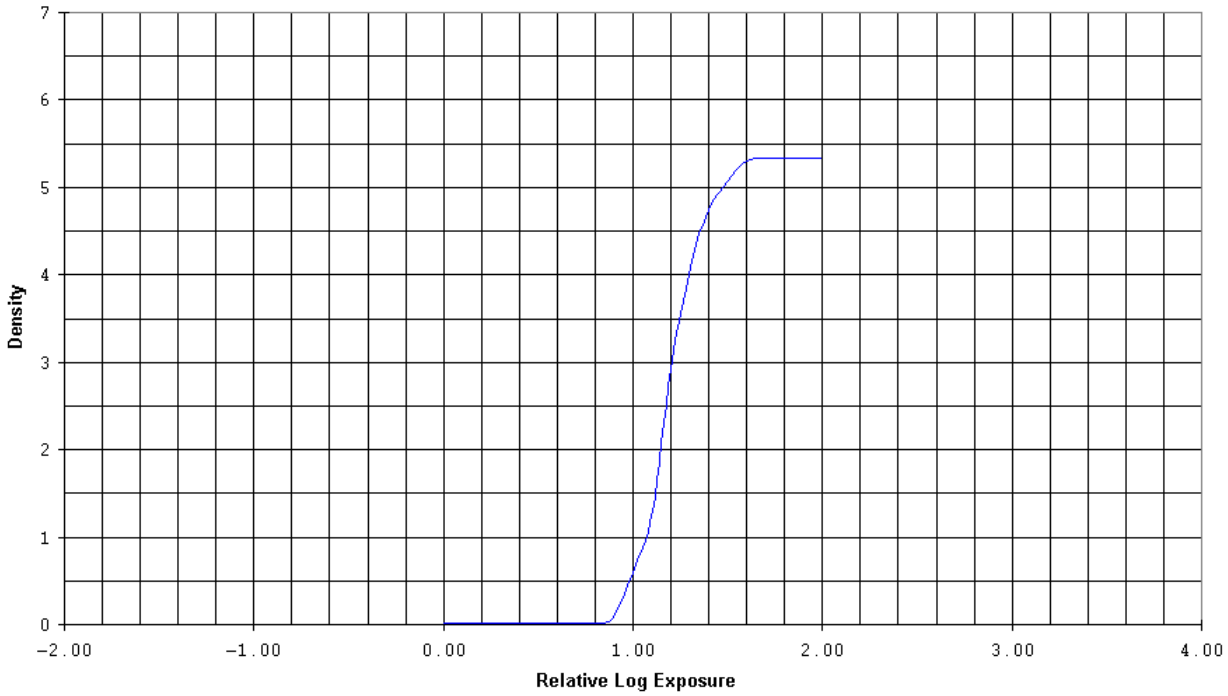
TI2104A 1-94, 3-97
CHARACTERISTIC, For Publication

KODAK EL Camera Film
Pulsed-xenon 10 sec;
KODAK RA 2000 Developer and Replenisher (1:4),
95F (35C), 30 sec PAKO Processor; Diffuse visual



TI2104B 1-94, 9-94
CHARACTERISTIC, For Publication

KODAK Camera Film / 2606
Pulsed-xenon 10 sec; KODALITH Super RT Developer, 80F (26.7C), 1 min 28 sec,
PAKO Processor; Diffuse visual



TI2104C 1-94, 9-94
SPECTRAL SENSITIVITY, For Publication

KODAK EL Camera Film
Effective Exp 1.4 sec;
KODAK RA 2000 Developer and Replenisher (1:4), 95 F (35 C), 30 sec,
PAKO Processor; Diffuse visual