



Kodak Premier PRD, PRD7, PRDM & PR7M Recording Film

Technical Information Instruction Sheet - TI9003
April 2006

Features / Customer Product Specifications

Kodak Premier recording films produce extremely hard dots with a high degree of linearity. They are designed for electronic recording graphic arts applications. All are very high contrast and, in most applications, deliver a D-max in excess of 4.5.

These products can be processed in **Kodak** RA 2000 Developer and Replenisher (diluted 1:2).

It may be possible to achieve satisfactory results in other rapid-access type developers that are indicated as Hard-Dot capable.

Premier Recording Films are coated on a dimensionally stable **Estar** Base with antistatic and surface properties to ensure dependable transport and handling behavior.

PRD, PRD7, PRDM, PR7M

- Broadband red-sensitive films suitable for use on helium-neon laser (HN; 633 nm) or red laser diode (RLD; 630 to 670 nm) recording devices.
 - PRD: 4-mil/0.1 mm clear; PRD7: 7-mil/0.18mm clear
 - PRDM and PR7M (matte versions of PRD and PRD7) feature a special matte surface that provides rapid, uniform drawdown for exposure of films on flexographic or smooth-surface plates.
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Safelight Recommendations

Use an **EncapSulite** T20/ND.75 Safelight or equivalent. Keep the film at least 1.2 meters (4 feet) from the safelight. Do not expose the film to safelight illumination for longer than two minutes.

European office:

EncapSulite International Ltd.
Auf dem Loor 14a
51143 Köln Germany
Phone: 49 (0)2203-8 37 37

US office:

EncapSulite International Inc.
1220 Bamore Road
Rosenberg, TX 77471
Phone: 1-281-239-0225



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Storage

Keep unexposed film and processed film in a cool, dry place, preferably at a temperature of 70°F (21°C) or lower and 50% RH. Process film as soon as possible after exposure.

Exposure

Following are the intended uses for **Kodak Premier** Recording Films. Variations in equipment and in methods of use preclude exact exposure recommendations. Follow exposure procedures recommended by the equipment manufacturer.

PRD, PRD7, PRDM, PR7M	Film recorders and imagesetters that use a helium-neon laser (HN, 633mm) or a red laser diode (RLD, 630 to 670mm) as the exposing source.
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Mechanized Processing

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

The recommended starting points for development and replenishment, using **Kodak RA 2000** Developer and Replenisher (diluted 1:2), **Kodak RA 2001** Developer and Replenisher (ready-to-use) or **Kodak RA 2050** Developer Replenisher (diluted 1:2) are:

Rapid Access Processors, 25 to 30 seconds at 95°F (35°C)				
Kodak Developers	Tank Turnovers Per Week	Basic Replenishment Rates (mls/m ²)		
		15% Exposed	50% Exposed	80% Exposed
Concentrates				
RA 2000/HX 161 Developer & Replenisher	Minimum of 1.0	350	465	600
RA 2050 Developer & Replenisher	Minimum of 1.0	160	235	300
Ready to Use				
RA 2001 Developer & Replenisher	Minimum of 1.0	350	465	600

For further information on processing see T12536—**Kodak** Concentrate and Ready-to-Use Developers and Fixers.



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1. Support

Dimensionally Stable Support

PRD, PRDM	4 mil (0.004 in., 0.10mm)	Estar base
PRD7, PR7M	7 mil (0.007 in., 0.18mm)	Estar thick 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 dimensional properties of the **Estar** base may vary slightly in different directions within a sheet; the differences that may exist, however, are not always aligned with the length and width directions:

Data for the 4 mil products (PRD, PRDM):

Thermal Coefficient of Linear Expansion

Unprocessed or Processed	0.001% per °F (0.0018% per °C)
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Humidity Coefficient of Linear Expansion

Unprocessed	0.0017% per % RH
Processed	0.0016% per %RH

Processing Dimensional Change

Dependent on drying conditions



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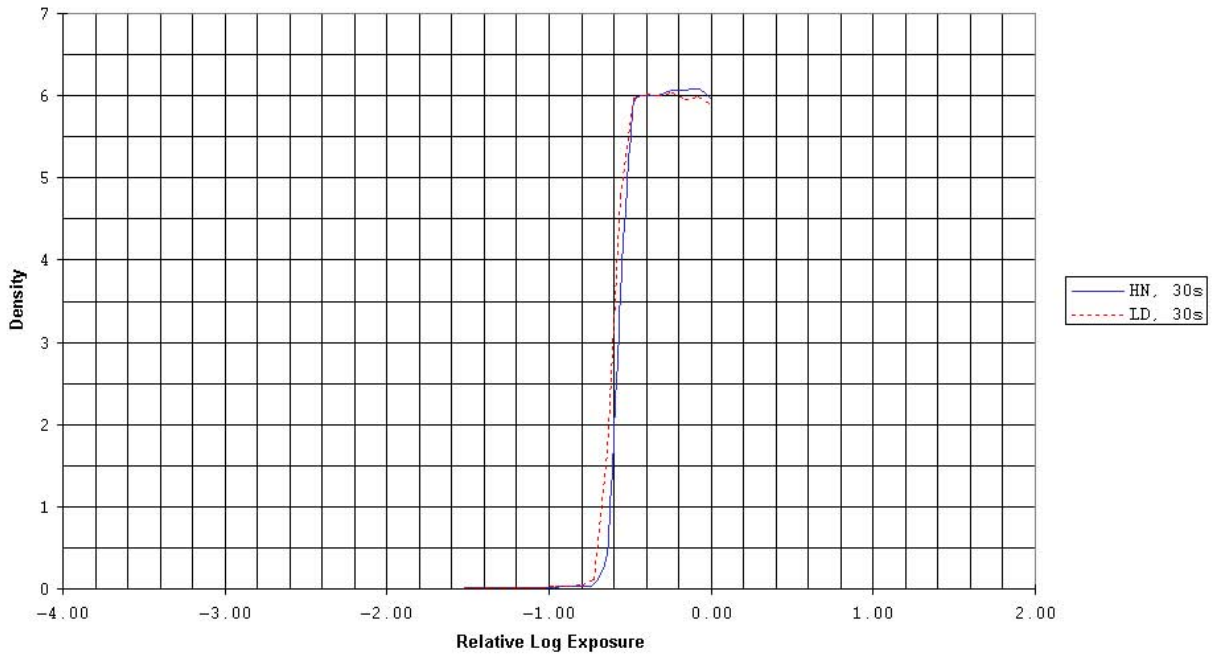


3. Reciprocity

With recommended processing, the reciprocity speed change is negligible within exposure range of 1/1000 second to 1 billionth second; there is no change in contrast.

4. Graphs

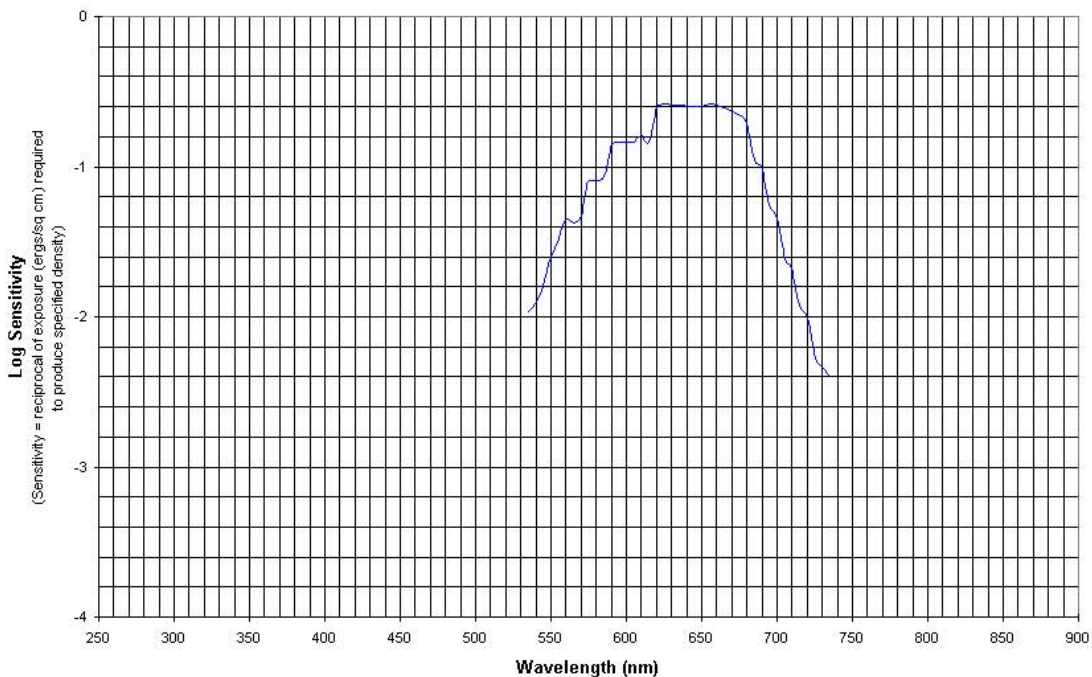
T19003A 2-01
CHARACTERISTIC, For Publication
KODAK PREMIER Recording Films PRD, PRD7, PRDM, PR7M
KODAK RA 2000 Developer and Replenisher (1:2)



Notice: While the data presented are typical of production coatings, they do not represent standards which must be met by Eastman Kodak Company. Varying storage, exposure, and processing conditions will affect results. The company reserves the right to change and improve the product characteristics at any time.



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SPECTRAL SENSITIVITY, For Publication
KODAK PREMIER Recording Film PRD, PRD7, PRDM, PR7M
Exposure: 1.4 sec; KODAK RA 2000 Developer and
Replenisher (1:2), diffuse visual; D=0.6>D-min; For Publication



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

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