**TI2278** Revised 07-01

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# KODAK DIRECT IMAGE Thermal Recording Film 1401 KODAK DIRECT IMAGE Thermal Recording Film / 2401 / 7 mil KODAK DIRECT IMAGE Thermal Recording Film / 1413 / 4 mil (SO-145)

#### **Features / Customer Product Specifications**

- Features Kodak Laser Dye Removal Technology
- Imagesetting film without the need for wet chemicals
- For use with specially equipped high intensity imagesetters
- High contrast provides sharp images
- Can be mixed with conventional films for roomlight contacting and platemaking
- Produces consistent, reliable results
- Superior dimensional stability
- Superior scratch resistance (1413 Film, formerly SO-145 Film)

#### **Safelight Recommendations**

While unexposed film is sensitive to white light, and prolonged exposure should be under yellow or UV-modified fluorescent light to avoid film desensitization, the film can be handled for up to (five) minutes during film loading without affecting the quality.

### **Storage**

For optimum performance, keep unexposed film in a cool, dry, dark place. Product should be stored in the original box at a temperature of 32°F (0°C) to 70°F (21°C) and 50% relative humidity. High temperatures and humidity can adversely affect product performance. Avoid storing exposed film in PVC (polyvinyl chloride) sleeves.

# Film Cleaning

Clean the film with a cleaner recommended by Kodak Polychrome Graphics. The solvents in most film cleaners extract the dyes from the film, which will destroy the image.

# **Opaque**

For best results, use an opaque recommended by Kodak Polychrome Graphics. Solvent-based opaques will extract dyes from the emulsion, destroying the image. Aqueous-based opaques will bead up on the film surface, resulting in poor masking.

# Handling

The thin dye layer on this film may be more sensitive to scratching than traditional silver halide films.

## **Disposal**

Film can be disposed of as normal office waste.

## **Exposure**

Follow the exposure recommendations provided by your imagesetter's manufacturer.

## **Dot Etching**

This film cannot be wet or dry etched.

### Measurement

Dot measurements should be made with a transmission densitometer equipped with a UV filter, such as the X-Rite 361T.

#### **End of Instruction Sheet**

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### 1) Support

#### **Dimensionally stable support:**

1401	4 mil (0.004 in., 0.10 mm)	ESTAR Base
2401	7 mil (0.007 in., 0.18 mm)	ESTAR Thick Base
1413 (formerly SO-145)	4 mil (0.004 in., 0.10 mm)	ESTAR Base

### 2) Dimensional Stability

Determined in accordance with ISO Standard.

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.

#### **Thermal Coefficient of Linear Expansion:**

0.002% per degree F

0. 004% per degree C (up to 100°C)

#### **Humidity Coefficient of Linear Expansion:**

per % RH- very small, no hydrophyllic layers

# 3) Spectral Sensitivity

D-max is greater than 3.5 at 360 nm.

# 4) Graphs<sup>1</sup>

**Spectral Density** 

**A)** (6-00)

<sup>&</sup>lt;sup>1</sup>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.

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> The 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 Polychrome Graphics representative.

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

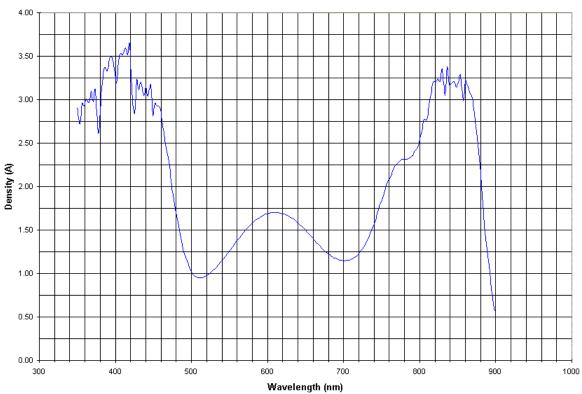
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Kodak Polychrome Graphics LLC Norwalk, CT 06851 USA

**End of Data Sheet** 

TI2278A 3-01
SPECTRAL DENSITY, For Publication

KODAK DIRECT IMAGE Thermal Recording Film Note-Data exceeds limit of instrument in some areas.



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