Kodak

# **KODAK TRI-X Reversal Film 7266**

We are committed to black & white film—improvements to our family of reversal films prove it. New KODAK TRI-X Reversal Film 7266 offers finer grain and increased sharpness, and includes EASTMAN KEYKODE Numbers for easy cross-reference of shots in minutes, not hours. Reduced static support allows for a cleaner image throughout the filmmaking process. And because our new films do not require processing in a bleach containing heavy metals, they are easier on the environment. Our improved films provide the rich blacks and high contrast you have come to expect from KODAK Black & White reversal films.

KODAK TRI-X Reversal Film 7266 (16 mm) is a high-speed, panchromatic black-and-white film with an antihalation undercoat that makes it suitable for general interior photography with artificial light. It can also be used in daylight and is particularly useful for sports pictures taken at regular speed or slow motion in weak light (overcast sky or late in the day). This film is characterized by excellent tonal gradation and sharpness.

When processed as a reversal film, the resulting positive can be used for projection or for duplication. If processed as a negative material by conventional methods, the film will yield satisfactory results, although there will be some loss in speed and an increase in granularity.

## BASE

KODAK TRI-X Reversal Film 7266 has a grey acetate safety base with an additional anti-halation undercoat. The back side of the base contains an anti-static layer with a carnauba wax lubricant.



All processing operations should be carried out in total darkness until the bleaching step has been completed. If necessary, the film can be examined (for a few seconds only) after development is 50 percent complete. Use a KODAK 3 Safelight Filter / dark green, with a 15-watt bulb, no closer to the film than 1.2 metres (4 feet). Following bleaching, normal room lighting can be used.

## **Negative Processing**

No safelight is recommended until after the stop bath. Unprocessed films must be handled in total darkness.

## STORAGE

Store unexposed film at 13°C (55°F) or lower. For extended storage, store at -18°C (0°F) or lower. Process exposed film promptly. Store processed film according to the recommendations in ANSI/PIMA IT9.11-1998: for medium-term storage (minimum of ten years), store at 10°C (50°F) or lower at a relative humidity of 20 to 30 percent; for extended-term storage (for preservation of material having permanent value), store at 2°C (35°F) or lower at a relative humidity of 20 to 30 percent. For active use, store at 25°C (77°F) or lower, at a relative humidity of  $50 \pm -5$  percent. This relates to optimized film handling rather than preservation; static, dust-attraction and curl-related problems are generally minimized at the higher relative humidity. After usage, the film should be returned to the appropriate medium- or long-term storage conditions as soon as possible.

For more information about medium- and long-term storage, see ANSI/PIMA IT9.11-1998,

SMPTE RP131-2002, and KODAK Publications No. H-1, *KODAK Motion Picture Film* available online at **http://www.kodak.com/US/en/motion/support/h1**, and No. H-23, *The Book of Film Care*.

## **EXPOSURE INDEXES**

Tungsten (3200K) - 160 Daylight - 2001

Use these indexes with incident- or reflected-light exposure meters and cameras marked for ISO or ASA speeds or exposure indexes. These indexes apply for meter readings of average subjects made from the camera position or for readings made from a gray card of 18-percent reflectance held close to and in front of the subject. For unusually lightor dark-colored subjects, decrease or increase the exposure indicated by the meter accordingly.

# **EXPOSURE TABLE - TUNGSTEN LIGHT**

At 24 frames per second (fps), 170-degree shutter opening:

Lens Aperture	<i>f</i> /1.4	f/2	f/2.8	<i>f</i> /4	f/5.6	f/8
Footcandles Required <sup>1</sup>	16	32	64	125	250	500

<sup>1</sup> At 18 frames per second, use 3/4 of the footcandles (fc) shown. When the film is used as a negative material, the values specified should be doubled.

## **Lighting Contrast -**

The recommended ratio of key-light-plus-fill-light to fill light is 2:1 or 3:1. However, you may use 4:1 or greater when a particular look is desired.

# FILTER FACTORS

KODAK WRATTEN Filter No.	3	8	8N5	12	15	21	23A	25	29	96 <sup>1</sup>
Daylight	1.5	2	4	2	2.5	3	5	10	40	8

<sup>1</sup>For use in bright sunlight to reduce the exposure without modifying color rendering or depth of field. This filter which has a neutral density of 0.90 provides a reduction in exposure equivalent of 3 full stops.

# **RECIPROCITY CHARACTERISTICS**

You do not need to make any exposure adjustments for exposure times from 1/1,000 to 1 second. If your exposure is in the 1/10,000 second range, it is recommended that you increase your exposure by  $\frac{1}{2}$  stop.

## **REVERSAL PROCESSING**

#### KODAK B&W Reversal Process

This film should be processed with KODAK B&W Reversal Process Kit Chemicals or with solutions prepared according to the formulas presented in KODAK Publication No.H-24.15, *Manual for Processing KODAK Motion Picture Films, Module 15.* 

#### Note: KODAK B&W Reversal First Developer and Replenisher (D-94A) and KODAK B&W Reversal Bleach and Replenisher (R-10) should be used with this film.

The recommended starting points for processing times and temperatures are shown in the table below. Actual processing times may differ from the ones shown because of machine design variables, such as film transport speed, degree of solution agitation, amount of solution carry-over, etc.

Process Step	Time 24.4°C (76°F)
First Developer KODAK B&W Reversal First Developer and Replenisher (D-94A)	60 sec
Wash	30 sec
KODAK B&W Reversal Bleach and Replenisher (R-10)	60 sec
Wash	30 sec
Clearing Bath	30 sec
Wash	30 sec
Re-exposure	800 footcandle seconds
Second Developer KODAK B&W Reversal Developer and Replenisher (D-95)	30 sec
Wash	30 sec
Fixer	30 sec
Wash	2 min

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

1.Super 8 automatic cameras will expose the film at ASA 160 due to the ANSI standard cartridge.

## **IDENTIFICATION**

After processing, the product code numbers 7266, emulsion and roll number identification, emulsion letter designator ED, and KEYKODE number are visible along the length of the film.

## **IMAGE STRUCTURE**

The modulation-transfer curves and the diffuse rms granularity were generated from samples of 7266 Film exposed with tungsten light and processed in the recommended reversal process at 24.4°C (76°F). For more information on image-structure characteristics, see KODAK Publication No. H-1, *KODAK Professional Motion Picture Film*.

## MTF

The "perceived" sharpness of any film depends on various components of the motion picture production system. The camera and projector lenses and film printers, among other factors, all play a role. But the specific sharpness of a film can be measured and charted in the Modulation Transfer Curve.

## rms Granularity

#### Refer to curve.

Read with a microdensitometer using a 48-micrometer aperture.

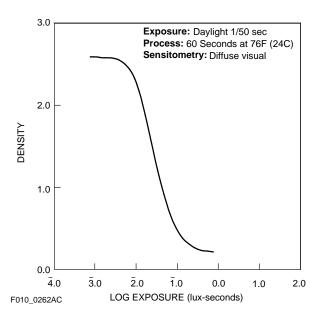
The "perception" of the graininess of any film is highly dependent on scene content, complexity, color, and density. Other factors, such as film age, processing, exposure conditions, and telecine transfer may also have significant effects.

## AVAILABLE ROLL LENGTHS

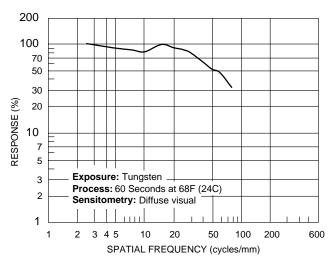
For information on film roll lengths, check Kodak's Motion Picture Films product catalog or see a Kodak sales representative in your country.

# CURVES

#### **Characteristic Curve**

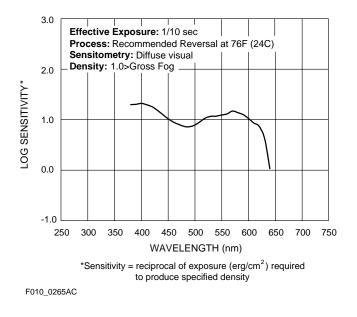


**Modulation Transfer Function Curve** 



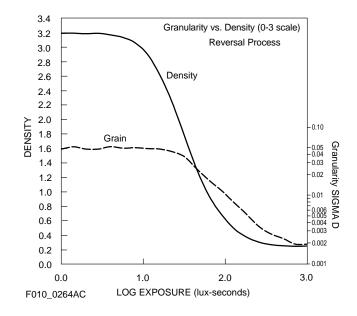
F010\_0263AC

MTF curve—This graph shows a measure of the visual sharpness of the film. The x-axis, "Spatial Frequency", refers to the number of sine waves per millimeter that can be resolved. The y-axis, "Response", corresponds to film sharpness. The longer and flatter the line, the more sine waves per millimeter that can be resolved with high degree of sharpness, and the sharper the film is.



Spectral Sensitivity Curve—These curves depict the sensitivity of this film to the spectrum of light.

#### rms Granularity Curve



**Note:** Sensitometric and Diffuse RMS Granularity curves are produced on different equipment. A slight variation in curve shape may be noticed.

To find the rms Granularity value for a given density, find the density on the left vertical scale and follow horizontally to the characteristic curve and then go vertically (up or down) to the granularity curve. At that point, follow horizontally to the Granularity Sigma D scale on the right. Read the number and multiply by 1000 for the rms value. Note: This curve represents granularity based on modified measuring techniques.

**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.

## **MORE INFORMATION**

Outside the United States and Canada, please contact your Kodak representative.

You can also visit our web site at **www.kodak.com/go/motion** for further information. You may want to bookmark our location so you can find us easily the next time.

Films	Cinematographer's Field Guide KODAK Publication No. H-2	
Image Structure	KODAK Motion Picture Film KODAK Publication No. H-1	
Specification Numbers	Cinematographer's Field Guide KODAK Publication No. H-2	
Storage	KODAK Motion Picture Film KODAK Publication No. H-1	
	The Book of Film Care KODAK Publication No. H-23	
LAD	LAD—Laboratory Aim Density KODAK Publication No. H-61	
Transfer	KODAK Telecine Analysis Film User's Guide KODAK Publication No. H-822	
	KODAK Telecine Exposure Calibration Film User's Guide KODAK Publication No. H-807	

#### Kodak Locations

FOR DIRECT ORDERING IN THE UNITED STATES AND CANADA: 1-800-621-FILM

#### CHICAGO, ILLINOIS

Information: 630-910-4929

DALLAS, TEXAS Information: 972-346-2979

#### HOLLYWOOD, CALIFORNIA

6700 Santa Monica Boulevard Los Angeles, California 90038-1203 Information: 323-464-6131

#### NEW YORK, NEW YORK

360 West 31st Street New York, New York 10001-2727 Information: 212-631-3418

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Kodak Canada, Inc. 4 Place du Commerce, Suite 100 Ile des Soeurs Verdun, Quebec Canada H3E 1J4 Information: 514-761-7001 Fax: 514-768-1563 Orders: 1-800-621-FILM (3456) Fax Orders: 1-866-211-6311

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