KODALITH Ortho Films, Type 3

ENGLISH

- Extremely high-contrast, orthochromatic film.
- Recommended for making line and halftone negatives and positives.
- Wide exposure and development latitude.
- Produces sharp halftone dots suitable for dot etching.

KODALITH Ortho Film, Type 3	Base	Thickness
2556 (ESTAR Base)	ESTAR	0.004-inch (0.10 mm)
3556 (ESTAR Thin Base)	ESTAR	0.0025-inch (0.064 mm)
4556 (ESTAR Thick Base)	ESTAR	0.007-inch (0.18 mm)
6556	Triacetate	0.0053-inch (0.135 mm)
8556 (Thin Base)	Triacetate	0.0032-inch (0.081 mm)

Safelight: 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. Avoid prolonged exposure to safelight illumination.

EXPOSURE • RELATIVE EXPOSURE INDEX

Pulsed-Xenon Arc	White-Flame Arc	Tungsten or Quartz-Iodine
ASA 12 • 12 DIN	ASA 12 12 DIN	ASA 8 10 DIN

These indexes are provided primarily as indicators of the relative speed of this film when compared with other Kodak graphic arts photographic materials. The pulsed-xenon arc 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. A 2-times film speed increase is indicated in the ASA system by doubling the index number and in the DIN system by increasing the number by 3.

EXAMPLES OF EXPOSURE

Pulsed-Xenon Arc: For a same-size (1:1) line reproduction, exposing with two 1500-watt pulsed-xenon arc lamps in reflectors at about 3 feet (0.9 metre) from the center of the copyboard, use a trial exposure time of 8 seconds at *f*/22.

Quartz-Iodine: For a same-size (1:1) line reproduction, exposing with four 500-watt quartz-iodine (3200 K) lamps in reflectors at about 3 feet (0.9 metre) from the center of the copyboard, use a trial exposure time of 16 seconds at *f*/22.

SCREEN EXPOSURES: When KODAK Contact Screens are used, exposures will be 6 to 12 times longer than for linework. With glass crossline screens, the factor is much higher and varies with the method of use.

FAN Value: 30.04

The above FAN (Film Adjustment Number) value is intended for use with the KODAK Data Module/Q-700BW (Mod 2) in the KODAK Data Center/Q-700.

FILTER FACTORS: When a KODAK WRATTEN Filter is used, multiply the amount of unfiltered exposure by the filter factor shown in the table below. Because lighting conditions vary, these factors may require adjustment.

Light Source	No. 8	No. 15	No. 30	No. 47B	No. 58
Pulsed-Xenon Arc	2.0	6.0	8.0	14.0	5.0
White-Flame Arc	2.5	8.0	6.0	12.0	5.0
Tungsten or Quartz-Iodine	1.5	3.5	12.0	20.0	3.0

PROCESSING • TRAY PROCESSING PROCEDURE

1. **Develop** at 68°F (20°C).

Developer	Development Times (minutes)			Useful Range* (minutes)
	Halftone Negative	Agitation	Line Negative	
KODALITH Super RT	2¾	Continuous	2¾	2¼ to 3¼
KODALITH	2¾	Continuous	2¾	2¼ to 3¼
KODALITH Fine-Line	—	†(see note below)	2¾	—
KODALITH Liquid (1:3)	2¾	Continuous	2¾	2¼ to 3¼

* Within this range of development times, satisfactory results can usually be obtained.
† With KODALITH Fine-Line Developer, use continuous agitation for about 45 seconds; then allow the film to remain at the bottom of the tray without agitation for about 2 minutes.

2. **Rinse** at 65 to 70°F (18.5 to 21°C) with agitation.
   KODAK Indicator Stop Bath—10 seconds
   KODAK Stop Bath SB-1a —10 seconds
3. **Fix** at 65 to 70°F (18.5 to 21°C) *with frequent agitation.*
   KODAK Fixer —2 to 4 minutes
   KODAK Fixing Bath F-5—2 to 4 minutes
   KODAK Rapid Fixer —1 to 2 minutes
4. **Wash** for about 10 minutes in running water at 65 to 70°F (18.5 to 21°C). To minimize drying marks, treat in KODAK PHOTO-FLO Solution after washing, or wipe surfaces carefully with a KODAK Photo Chamois, a soft, wet viscose sponge, or a soft squeegee such as a windshield wiper blade.
5. **Dry** in a dust-free place.

REDUCTION AND DOT ETCHING: KODAK Dot Etch or KODAK Ceric Sulfate Dot Etching Solution R-20 can be used for dot etching and clearing line negatives or positives.

MECHANIZED PROCESSING: For recommendations, see your Kodak representative or write to Kodak in your country. In U.S.A., write to Eastman Kodak Company, Department 662C, Rochester, N.Y. 14650. Please specify film, processor model, and chemicals.

PROFESSIONAL PHOTOGRAPHY APPLICATIONS

COPYING LINE ORIGINALS

Exposure: Film speed depends upon the developer being used. Trial exposure times given below apply to a same-size (1:1) reproduction exposed with two 500-watt reflector-type photolamps at about 4½ feet (1:4 metres) from the center of the copy.

Developer	Exposure Index	Trial Exposure Time
KODAK D-11	ASA 25 15 DIN	9 seconds at *f*/22 *or* 9 seconds at *f*/11 with a 0.60 neutral density filter
KODALITH Liquid (1:3)	ASA 8 10 DIN	7 seconds at *f*/11

Exposure indexes are for tungsten illumination, for use with meters marked for ASA or DIN speeds as indicated to establish trial exposures in copying. The numbers apply to incident-light meters directly and to reflected-light meters used with the KODAK Neutral Test Card (18% gray side) at the copyboard. A matte white card will serve, in which case expose for five times the calculated exposure time. Exposure indexes apply to lenses focused at infinity. For same-size reproduction, give four times the indicated exposure.

Development: Develop at 68°F (20°C) in tray with continuous agitation.

Developer	Development Time	Useful Range
KODAK D-11	2½ minutes	2 to 3 minutes
KODALITH Liquid (1:3)	2¾ minutes	2¼ to 3¼ minutes

Rinse, Fix, Wash, and Dry as described above for graphic arts applications.

Storage: Keep the unexposed film in a cool, dry place. Process film as soon as possible after exposure.

The Kodak materials described in this publication are available from those dealers normally supplying Kodak materials for the graphic arts. Equivalent materials may be used if desired.

Notice: This film will be replaced if defective in manufacture, labeling, or packaging. Except for such replacement, the sale or any subsequent handling of this film is without warranty or liability even though defect, damage, or loss is caused by negligence or other fault.

DEUTSCH

- Orthochromatischer Film mit extrem hohem Kontrast.
- Wird für die Herstellung von Strich- und Rasternegativen und Positiven in der fotomechanischen Reproduktion empfohlen.
- Großer Belichtungs- und Entwicklungsspielraum.
- Es bilden sich scharfe Rasterpunkte, die abgeschwächt werden können.