

# KODAK PROFESSIONAL Black-and-White Films, Papers, and Chemicals



Today you can push your creative limits further with Kodak Professional black-and-white products. Kodak offers you a wide array of black-and-white films, papers, and chemicals to meet your most demanding photographic and printmaking needs. You can count on these products for outstanding performance and versatility.



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## KODAK BLACK-AND-WHITE FILMS

### KODAK Commercial Film

For copying continuous-tone black-and-white originals and applications when red and green sensitivity are unnecessary or unwanted.

- Film speed: Daylight, EI 50; Tungsten, EI 8
- Primary features:
  - Blue color sensitivity
  - Very fine grain, high resolving power
  - KODAK 1 Safelight Filter (red)
  - 7-mil ESTAR Thick Base
- Primary applications:
  - Advertising/illustration
  - Copying
  - Editorial
- Recommended KODAK Developers: tray and tank—DK-50, HC-110

Format: sheets

**Note:** For more information, see KODAK Publications F-16 and E103BF.

### KODAK EKTAGRAPHIC HC Slide Film / HCS

Orthochromatic film designed for copying line drawings and text for making reverse-text black-and-white title slides.

- Film speed: Depends on developer used
- Primary features:
  - Extremely high contrast
  - Clear image areas can be colored with water-soluble dyes or watercolors
  - Color filter can be sandwiched with the transparency to produce a colored title slide
  - KODAK 1A Safelight Filter (light red)
- Primary applications:
  - Copying
  - Education
  - Medical/scientific
- Recommended KODAK Developers: KODALITH Super RT, D-11

Format: 135

**Note:** For more information, see KODAK Publications F-12 and E103BF.

### KODAK EKTAPAN Film / EKP

Panchromatic film, particularly suited for work with electronic flash. Speed matched to produce black-and-white negatives when color films are also used.

- Film speed: Daylight, ISO 100; Tungsten, ISO 100
- Primary features:
  - Fine grain, medium resolving power
  - Moderate degree of enlargement
  - Retouching surface on both sides
  - 7-mil ESTAR Thick Base
  - Antihalation backing
- Primary applications:
  - Advertising/illustration
  - Copying
  - Corporate/industrial
  - Fine art
  - Medical/scientific
  - Portraiture
- Recommended KODAK Developers: tray and tank—XTOL, T-MAX RS, HC-110, DK-50, D-76, MICRODOL-X; KODAK VERSAMAT Processor or other roller-transport processors—DURAFLO RT Chemicals

Formats: Long roll, sheet

**Note:** For more information, see KODAK Publications F-10 and E103BF.

### EASTMAN Fine Grain Release Positive Film 5302 KODAK Fine Grain Positive Film 7302

Blue-sensitive films that provide excellent definition, even with a high degree of magnification. Use EASTMAN Fine Grain Release Positive Film to make black-and-white slides from 35 mm color transparencies (two-step process with KODAK T-MAX 100 Professional Film). Use Fine Grain Positive Film to make black-and-white-transparencies from continuous-tone or line negatives.

- Printing speed: 250
- Primary features:
  - Blue-sensitive
  - Extremely fine grain, high sharpness, high resolving power
  - Tungsten balanced
  - KODAK OA Safelight Filter (greenish yellow) or 1A (light red)
- Primary applications:
  - Producing black-and-white slides from continuous-tone negatives
- Recommended KODAK Developers: tray—D-76 (low contrast), DEKTOL (moderate contrast), D-11 (high contrast)

Formats: (5302) long roll; (7302) sheet

**Note:** For more information, see KODAK Publication E103BF.

### KODAK High Speed Infrared Film / HIE, HSI

Has many applications in aerial, industrial, scientific, and documentary photography. Also for abstract tone reproduction in pictorial applications. Not intended for high degrees of enlargement.

- Film speed: Normal ISO speed values do not apply. Make trial exposures under typical conditions. With a KODAK WRATTEN Filter No. 25, try a setting of EI 50 (daylight) or EI 125 (tungsten) and bracket  $\pm 2$  stops.
- Primary features:
  - Fine grain, moderately high contrast
  - Infrared-sensitive to approximately 900 nm; maximum sensitivity from 750 nm to 840 nm
  - Filter necessary for most applications. For general photography, use a KODAK WRATTEN Gelatin Filter No. 25; for infrared photography, use a WRATTEN Filter No. 87, 87C, or 89
  - Available on 4-mil ESTAR Base or 7-mil ESTAR Thick Base
- Primary applications:
  - Advertising/illustration
  - Aerial
  - Corporate/industrial
  - Fine art
  - Landscape
  - Law enforcement
  - Medical/scientific
  - Photo hobbyist
  - Portraiture
- Recommended KODAK Developers: XTOL, D-19, D-76, HC-110, T-MAX (roll film only)
- Total darkness

Formats: (HIE) 135, long roll (4-mil ESTAR Base; (HSI) sheet (7-mil ESTAR Thick Base)

**Note:** For more information, see KODAK Publications F-13 and E103BF.

## KODAK PLUS-X Pan Film / PX

### KODAK PLUS-X Pan Professional Film / PXP, PXE, PXT

Good general-purpose panchromatic film for use under most lighting conditions except dim existing light. PLUS-X Pan Professional Film / PXP has a retouching surface on the emulsion side. PXE and PXT have a retouching surface on the emulsion and the base side. PLUS-X Pan Professional Film is recommended for studio use, particularly when a high degree of enlargement is needed.

- Film speed: ISO 125
- Primary features:
  - Extremely fine grain, excellent sharpness, high resolving power
- Primary applications:
  - Advertising/illustration
  - Fine art
  - Landscape
  - Portraiture
- Recommended KODAK Developers: XTOL, T-MAX RS, T-MAX (rolls), HC-110, D-76, MICRODOL-X, DK-50, DURAFLO RT Chemicals

Formats: (PX) 135, long roll; (PXP) 120, 220; (PXE) long roll; (PXT) sheet (7-mil ESTAR Thick Base)

**Note:** Note: For more information, see KODAK Publications F-8 and E103BF.

## KODAK PROFESSIONAL B/W Duplicating Film SO-132

Orthochromatic, medium-contrast, direct-positive film for one-step duplication of continuous-tone black-and-white negatives. Long tonal range for high-quality duplicates.

- Film speed: Very slow
- Primary features:
  - Orthochromatic
  - Long tonal range for high-quality duplicates
  - KODAK 1A Safelight Filter / light red with a 15-watt bulb at least 4 feet from film
  - 7-mil ESTAR Thick Base
- Primary applications
  - Copying
  - Dupe negative
- Recommended KODAK Developers: D-76, DK-50, DEKTOL, XTOL, DURAFLO RT Chemicals

Format: sheet

**Note:** For more information, see KODAK Publications F-11 and E103BF.

## KODAK Professional Copy Film

Copy film with increased highlight contrast for copying black-and-white continuous-tone originals.

- Film speed: Tungsten and quartz iodine, EI 12; pulsed xenon, EI 25; white-flame arc, EI 25
- Primary features:
  - Fine grain, medium resolving power
  - Orthochromatic
  - KODAK 2 Safelight Filter / dark red
  - ESTAR Thick Base
  - Increased highlight contrast
- Primary applications:
  - Copying
- Recommended KODAK Developers: HC-110, DK-50, DURAFLO RT Chemicals

Format: sheet

**Note:** For more information, see KODAK Publications F-17 and E103BF.

## KODAK Rapid Process Copy Film / RPC

Low-contrast, blue-sensitive, direct duplicating film on a blue-tinted polyester base.

- Film speed: Very slow
- Primary features:
  - Blue sensitive
  - For copying x-rays and other flat art
  - Positive image from a positive original with normal process
- Primary applications:
  - Advertising/illustration
  - Medical/scientific
- Recommended KODAK Developer: DK-50

Formats: 135, long roll

**Note:** For more information, see KODAK Publication E103BF.

## KODAK T-MAX 100 Professional Film / TMX

Ideal for a variety of applications. Especially useful for detailed subjects when maximum image quality is needed. (Also available on glass plates.)

- Film speed: EI 100
- Primary features:
  - Panchromatic
  - Extremely high sharpness, extremely fine grain, very high resolving power
  - A very high degree of enlargement
  - Expanded exposure latitude
  - Very long straight line on characteristic curve
- Primary applications:
  - Advertising
  - Architectural
  - Copying
  - Corporate/industrial
  - Editorial
  - Education
  - Fine art
  - Landscape
  - Medical/scientific
  - Photojournalism/sports
  - Portraiture
- Recommended KODAK Developers: XTOL, T-MAX, T-MAX RS, D-76, HC-110, DURAFLO RT Chemicals
- Process to a black-and-white transparency (EI 50) using the KODAK T-MAX 100 Direct Positive Film Developing Outfit
- Total darkness (no safelight recommended)

Formats: 135, 120, long roll, sheet, KODAK READYLOAD Packets

**Note:** For more information, see KODAK Publications F-32 and E103BF.

## KODAK PROFESSIONAL T-MAX Black-and-White Film T400 CN

Multi-purpose black-and-white film for processing in **Process C-41** with color negative films. For printing on either black-and-white papers or color negative papers.

- Film speed: 400
- Primary features:
  - Wide exposure latitude
  - Extremely fine grain and high sharpness
  - Excellent latent-image keeping properties
  - Pushable in Process C-41
  - Intermixes with color negative film in Process C-41
  - Print tone is adjustable on color negative paper
- Primary applications:
  - Advertising/illustration
  - Corporate/industrial
  - Education
  - General
  - Law enforcement
  - Medical/scientific
  - Photo hobbyist
  - Photojournalist/sport
  - Portraiture
- Do not process this film in conventional black-and-white chemicals. Process in KODAK FLEXICOLOR Chemicals, Process C-41.
- Total darkness (no safelight recommended)

Formats: 135, 120, 220, sheet

**Note:** For more information, see KODAK Publications F-2350 and E103BF.

## KODAK T-MAX 400 Professional Film / TMY

Especially useful for dimly lighted subjects, fast shutter speeds, for extended flash range, and good depth of field.

- Film speed: EI 400 (also for use at speeds of EI 800 and EI 1600)
- Primary features:
  - Panchromatic
  - Very high sharpness, extremely fine grain, high resolving power
  - High degree of enlargement
  - Shorter push-processing development time—no increase for 1-stop push, shorter 2-stop push-times than other films require
- Primary applications:
  - Corporate/industrial
  - Editorial
  - Education
  - General
  - Law enforcement
  - Military/instrumentation
  - Photojournalism/sports
  - Portraiture
- Recommended KODAK Developers: XTOL, T-MAX, T-MAX RS, D-76, HC-110, MICRODOL-X, DURAFLO RT Chemicals
- Total darkness (no safelight recommended)

Formats: 135, 120, long roll, sheet

**Note:** For more information, see KODAK Publications F-32 and E103BF.

## KODAK T-MAX P3200 Professional Film / TMZ

Multispeed panchromatic negative film that combines very high to ultra-high film speeds with finer grain than that of other fast black-and-white films. Allows you to take photographs in many situations where photography was previously impossible.

- Film speed: EI 800 to 25,000 with push processing
- Primary features:
  - Wide exposure latitude
  - Excellent sharpness and shadow detail, fine grain
- Primary applications:
  - Fine art
  - Law enforcement
  - Medical/scientific
  - Military/instrumentation
  - Photojournalism/sports
- Recommended KODAK Developers: XTOL, T-MAX, T-MAX RS, D-76, HC-110
- Total darkness (no safelight recommended)

Formats: 135, long roll

**Note:** For more information, see KODAK Publications F-32 and E103BF.

## KODAK Technical Pan Film / TP

Outstanding pictorial film; for applications that require high-definition records. Suitable for making high-quality enlargements at magnifications of 25X or even 50X; making continuous-tone originals or copy negatives; making black-and-white reverse-text and title slides; and personal microfilming. The 135 size and 35 mm long rolls have a dimensionally stable 4-mil ESTAR-AH Base. Sheet sizes have a dimensionally stable 7-mil ESTAR Thick Base. The 120 size has a 3.6-mil acetate base.

- Film speed: Medium—depends on application
- Primary features:
  - Micro-fine or extremely fine grain (depending on developer), extremely high resolving power
  - Variable contrast
  - Panchromatic, extended red
- Primary applications:
  - Aerial
  - Copying
  - Corporate/industrial
  - Education
  - Fine art
  - Landscape
  - Law enforcement
  - Medical/scientific
  - Portraiture
- Recommended KODAK Developers: TECHNIDOL Liquid, HC-110, D-76, D-19, XTOL, DEKTOL, DURAFLO RT
- Process to a black-and-white high-contrast transparency using the KODAK T-MAX 100 Direct Positive Film Developing Outfit
- Total darkness (no safelight recommended)

Formats: 135, 120, long roll, sheet

**Note:** For more information, see KODAK Publications P-255 and E103BF.

## KODAK TRI-X Pan Film / TX

All-purpose panchromatic film for subjects requiring good depth of field and high shutter speeds, and for extending the flash distance range.

- Film speed: ISO 400
- Primary features:
  - Fine grain, high sharpness
  - Medium contrast, moderate degree of enlargement, wide exposure latitude
  - 120-size film can be retouched on the emulsion side
- Primary applications:
  - Corporate/industrial
  - Editorial
  - Education
  - Fine art
  - Law enforcement
  - Military/instrumentation
  - Photojournalism/sports
- Recommended KODAK Developers: XTOL, T-MAX, T-MAX RS, HC-110, D-76, MICRODOL-X, DK-50, DURAFLO RT Chemicals
- Total darkness

Formats: 135, 120, long roll

**Note:** For more information, see KODAK Publications F-9 and E103BF.

## KODAK TRI-X Pan Professional Film / TXP, TXT

Panchromatic film especially suited to low-flare interior tungsten or flash lighting.

- Film speed: ISO 320
- Primary features:
  - Excellent gradation and brilliant highlights
  - Medium contrast, moderate degree of enlargement, wide exposure latitude
  - Acetate base or 7-mil ESTAR Thick Base
  - Retouching surface on both sides
- Primary applications:
  - Advertising/illustration
  - Architecture
  - Corporate/industrial
  - Fine art
  - Portraiture
- Recommended KODAK Developers: XTOL, T-MAX, T-MAX RS, HC-110, DK-50, D-76, MICRODOL-X, DURAFLO RT
- Total darkness

Formats: (TXP) 120, 220; (TXT) sheet

**Note:** For more information, see KODAK Publications F-9 and E103BF.

## KODAK VERICHROME Pan Film

An outstanding choice for all-around picture-taking with 120-size roll-film cameras.

- Film speed: ISO 125
- Primary features:
  - Extremely fine grain, very high sharpness, excellent exposure latitude
  - Panchromatic
  - Contrast controlled by development
- Primary applications:
  - Corporate/industrial
  - General
  - Portraiture
- Recommended KODAK Developers: XTOL, T-MAX, T-MAX RS, D-76, HC-110, MICRODOL-X, DURAFLO RT Chemicals
- Total darkness

Format: 120

**Note:** For more information, see KODAK Publications F-7 and E103BF.

# KODAK BLACK-AND-WHITE PAPERS

## RESIN-COATED / GRADED CONTRAST PAPERS

Support	KODAK Paper	
	Selective Contrast	Graded Contrast
Resin-Coated	POLYCONTRAST III RC POLYMAX II RC	EKTAMAX RA KODABROME II RC P-MAX Art RC PANALURE SELECT RC
Fiber Base	EKTAMATIC SC POLYMAX Fiber POLYMAX Fine-Art	AZO EKTALURE ELITE Fine-Art KODABROMIDE

## RESIN-COATED / SELECTIVE CONTRAST PAPERS

### KODAK POLYCONTRAST III RC Paper

Fast, resin-coated, selective-contrast, general-purpose enlarging paper with a neutral-black image tone.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-White, smooth, glossy;  
N-White, smooth, semi-matt;  
E-White, fine-grained, lustre
  - Contrast: Selective, for use with KODAK POLYMAX Filters or equivalent
  - Support: Medium-weight with optical brightener
  - Image Tone: Neutral black
- Suggested applications:
  - Advertising/Commercial
  - Corporate/Industrial
  - Education/Photo enthusiast/School finishing
  - Government/Law enforcement/Military
  - Medical/Scientific
  - Photofinishing
  - Photojournalism
- Processing (For machine or tray)
  - Equipment: For roller-transport and continuous paper processors that use conventional black-and-white paper processing solutions
  - Recommended KODAK Developers: (machine) POLYMAX RT, ROYALPRINT; (tray) DEKTOL, POLYMAX T, EKTONOL
- Safelight: KODAK Safelight Filter OC (light amber)

**Note:** For more information, see KODAK Publications G-21 and E103BP.

### KODAK POLYMAX II RC Paper

Fast, resin-coated, selective-contrast, general-purpose enlarging paper with outstanding highlight detail.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-White, smooth, glossy;  
N-White, smooth, semi-matt;  
E-White, fine-grained, lustre
  - Contrast: Selective, for use with KODAK POLYMAX Filters or equivalent
  - Support: Medium-weight with optical brightener
  - Image Tone: Neutral black
  - Excellent D-min and highlight tone reproduction
  - Very rich blacks and excellent separation of dark tones
  - Excellent process latitude
- Suggested applications:
  - Advertising/Commercial
  - Aerial/Mapping
  - Corporate/Industrial
  - Education/Photo enthusiast/School finishing
  - Government/Law enforcement/Military
  - Medical/Scientific
  - Photofinishing
  - Photojournalism
  - Portrait
- Processing (For machine or tray):
  - Equipment: For roller-transport and continuous paper processors that use conventional black-and-white paper processing solutions
  - Recommended KODAK Developers: (machine) POLYMAX RT, ROYALPRINT; (tray) DEKTOL, POLYMAX T, EKTONOL
- Safelight: KODAK Safelight Filter OC (light amber)

**Note:** For more information, see KODAK Publications G-26 and E103BP.

### KODAK EKTAMAX RA Professional Paper

Fast resin-coated papers for making black-and-white prints from color negatives. For short-term applications ONLY, such as graphics reproduction, displays, real-estate brochures, publications, press releases, and portrait proofs. Acceptable for other applications as well where long-term display or keeping are **not** required. For uses where images require long-term keeping, a traditional black-and-white paper is a better choice. Designed for processing in KODAK EKTACOLOR RA Chemicals for Process RA-4. Eliminates the need for a dedicated black-and-white process.

- Primary features:
    - Surface (base tint, texture and sheen):  
F-White, smooth, glossy;  
N-White, smooth, semi-matt
    - Contrast: L grade for low-contrast applications. Features contrast similar to that of KODAK PANALURE SELECT RC Paper, grade M. Well-suited for school-finishing applications. M grade where higher contrast is preferred. Features higher contrast than that of EKTAMAX RA Professional Paper / L. Well-suited for photojournalism and commercial and industrial applications.
    - Support: Medium-weight, resin-coated
    - Image Tone: Neutral black
    - Designed for printing with automatic printers or enlargers
  - Suggested applications
    - Advertising/Commercial
    - Contact printing
    - Corporate/Industrial
    - Government/Law enforcement/Military
    - Medical/Scientific
    - Photofinishing
    - Photojournalism
    - Portrait
    - Proof printing
  - Processing (For machine):
    - Equipment: For roller-transport and continuous paper processors that use *color negative* paper processing solutions
    - Recommended KODAK Developers: KODAK EKTACOLOR RA Chemicals for Process RA-4
  - Safelight: None recommended. If absolutely necessary, use KODAK 13 Safelight Filter (dark amber).
- Note:** For more information, see KODAK Publications G-22 and E103BP.

## KODABROME II RC Paper

Fast, resin-coated, graded-contrast, enlarging paper for general use.

- Primary features:
  - Surface (base tint, texture and sheen):  
F–White, smooth, glossy;  
N–White, smooth, semi-matt
  - Contrast: (1) soft, (2) medium, (3) hard, (4) extra hard and (5) ultra hard
  - Support: Medium-weight, resin-coated, with optical brightener
  - Image Tone: Neutral black
- Suggested applications:
  - Advertising/Commercial
  - Aerial/Mapping
  - Corporate/Industrial
  - Education/Photo enthusiast/School finishing
  - Government/Law enforcement/Military
  - Photofinishing
  - Proof printing
- Processing (For machine or tray):
  - Equipment: For roller-transport and continuous paper processors that use conventional black-and-white paper processing solutions
  - Recommended KODAK Developers: (machine) POLYMAX RT, ROYALPRINT; (tray) DEKTOL, POLYMAX T
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-16 and E103BP.

## KODAK P-MAX Art RC Paper

Fast, resin-coated, graded contrast, enlarging paper designed for hand-coloring with oil paints, liquid or dry dyes, pastels, and pencils. Excellent for fine-art applications.

- Primary features:
  - Surface (base tint, texture and sheen):  
V–White, suede, double-matt (unique surface provides excellent “tooth”)
  - Contrast: (2) medium and (3) hard
  - Support: Medium-weight, resin-coated, with optical brightener
  - Image Tone: Neutral to warm black
  - No backprinting
- Suggested applications:
  - Advertising/Commercial
  - Aerial/Mapping
  - Education/Photo enthusiast/School finishing
  - Fine art
  - Hand coloring
  - Portrait
- Processing (For machine or tray):
  - Equipment: For roller-transport and continuous paper processors that use conventional black-and-white paper processing solutions
  - Recommended KODAK Developers: (machine) POLYMAX RT; (tray) DEKTOL, POLYMAX T, EKTONOL
- Safelight: KODAK Safelight Filter OC (light amber)

**Note:** For more information, see KODAK Publications G-28 and E103BP.

## KODAK PANALURE SELECT RC Paper

Panchromatic, developer-incorporated, projection-speed paper designed for making black-and-white enlargements (or contact prints with reduced illumination) from color negatives.

- Primary features:
  - Surface (base tint, texture and sheen):  
F–White, smooth, glossy
  - Contrast:  
L grade for printing negatives of high contrast;  
M grade for printing negatives of average contrast;  
H grade for printing negatives of low contrast
  - Support: Medium-weight, resin-coated, with optical brightener
  - Image Tone: Warm black
- Suggested applications:
  - Advertising/Commercial
  - Contact printing
  - Corporate/Industrial
  - Education/School finishing
  - Government/Law enforcement/Military
  - Medical/Scientific
  - Photojournalism
  - Portrait
- Processing (For machine or tray):
  - Equipment: For roller-transport and continuous paper processors that use conventional black-and-white paper processing solutions
  - Recommended KODAK Developers: (machine) POLYMAX RT, ROYALPRINT; (tray) DEKTOL, EKTONOL, POLYMAX T
- Safelight: KODAK 13 Safelight Filter (amber)

**Note:** For more information, see KODAK Publications G-27 and E103BP.

## FIBER BASE / SELECTIVE-CONTRAST PAPERS

### KODAK EKTAMATIC SC Paper

For applications where fast processing is required and limited keeping is acceptable. Stabilization processing produces prints that will keep for a limited time. Print life can be extended by fixing and washing. For use where images require long-term keeping, a traditional black-and-white paper is recommended. Designed for activation-stabilization processing.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-White, smooth, glossy
  - Contrast: Selective contrast for printing with KODAK POLYMAX Filters or equivalent
  - Support: Single-weight, resin-coated, with optical brightener
  - Image Tone: Warm black with stabilization processing; neutral black with tray processing
  - Fast stabilization processing
  - Recommended for tungsten illumination
- Suggested applications:
  - Contact printing
  - Corporate/Industrial
  - Government/Law enforcement/Military
  - Medical/Scientific
  - Photojournalism
  - Proof printing
- Processing (For machine or tray):
  - Equipment: Stabilization processor
  - Recommended KODAK Developers: (machine) KODAK SII Activator and KODAK EKTAMATIC S30 Stabilizer; (tray) DEKTOL, POLYMAX T
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-12 and E103BP.

### KODAK POLYMAX Fiber Paper

A selective-contrast, *single-weight*, fiber-base, black-and-white, enlarging paper.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-White, smooth, glossy  
N-White, smooth, semi-matt
  - Contrast: Selective contrast with KODAK POLYMAX Filters or equivalent
  - Support: Single-weight, fiber-base, with optical brightener
  - Image Tone: Neutral black
- Good highlight and low-contrast tone reproduction
- Good separation among shadow tones
- Enhances performance of KODAK T-MAX Professional Films
- Suggested applications:
  - Advertising/Commercial
  - Contact printing
  - Education/Photo enthusiast/School finishing
  - Photojournalism
  - Proof printing
- Processing (For tray):
  - Recommended KODAK Developers: (tray) POLYMAX T, DEKTOL, EKTONOL
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-7 and E103BP.

### KODAK POLYMAX Fine-Art Paper

A selective-contrast, *double-weight*, fiber-base, black-and-white enlarging paper.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-White, smooth, glossy  
N-White, smooth, semi-matt  
C-Cream, smooth, lustre
  - Contrast: Selective contrast with KODAK POLYMAX Filters
  - Support: Double-weight, fiber-base. F and N surfaces have optical brighteners in the emulsion and base. C surface has no optical brighteners in either the emulsion or base.
  - Image Tone: Neutral black
- Good highlight and low-contrast tone reproduction
- Good separation among shadow tones
- Enhances performance of KODAK T-MAX Professional Films
- Suggested applications:
  - Advertising/Commercial
  - Corporate/Industrial
  - Display/salon
  - Education/Photo enthusiast/School finishing
  - Fine art
  - Hand-coloring
  - Portrait
- Processing (For tray):
  - Recommended KODAK Developers: (tray) POLYMAX T, DEKTOL, EKTONOL
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-24 and E103BP.



## FIBER BASE / GRADED CONTRAST PAPERS

### KODAK AZO Paper

Blue-sensitive graded paper for use with contact printing equipment.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-White, smooth, glossy
  - Contrast: (1) soft, (2) medium, (3) hard
  - Support: Single-weight, fiber-base
  - Image Tone: Neutral black
- Suggested applications:
  - Advertising/Commercial
  - Contact printing
  - Government/Law enforcement/Military
  - Proof printing
- Processing (For tray):
  - Recommended KODAK Developers: (tray) DEKTOL, POLYMAX T, EKTAFL0 Type 2, EKTONOL, SELECTOL-SOFT
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-10 and E103BP.

### KODAK EKTALURE Paper\*

Medium-speed, single-contrast, double-weight, fiber-base, warm-tone paper. For making enlargements and contact prints with reduced illumination.

- Primary features:
  - Surface (base tint, texture and sheen):  
G-Cream, fine-grained, lustre
  - Contrast: Single contrast (approximately printing grade 3)
  - Support: Double-weight, fiber-base
  - Image Tone: Warm brown-black
  - Works well with various black-and-white paper toners
- Suggested applications:
  - Display/salon
  - Education/Photo enthusiast/School finishing
  - Fine art
  - Hand-coloring
  - Portrait
- Processing (For tray):
  - Recommended KODAK Developers: (tray) EKTAFL0 Type 2, DEKTOL, EKTONOL, SELECTOL-SOFT, POLYMAX T
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-9 and E103BP.

*\*To be discontinued by year end 1999 or when inventories are depleted.*

### KODAK ELITE Fine-Art Paper\*

Provides an excellent tonal range, with deep, detail-rich blacks and brilliant whites.

- Primary features:
  - Surface (base tint, texture and sheen):  
S-Ultra-smooth, high lustre (intended for air drying)
  - Contrast: (2) medium and (3) hard
  - Support: Premium weight, fiber base (13.2 mils, heavier than double-weight paper)
  - Image Tone: Neutral black
  - For exposure by tungsten enlarger lamps or common cold-light sources
  - Extraordinary development latitude
  - Clear, extra-thick gelatin overcoat
- Suggested applications:
  - Advertising/Commercial
  - Display/salon
  - Fine art
  - Portrait
- Processing (For tray):
  - Recommended KODAK Developers: (tray) DEKTOL, POLYMAX T
  - Split-development techniques with KODAK SELECTOL-SOFT and DEKTOL Developers produce intermediate contrasts
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-19 and E103BP.

*\*To be discontinued by year end 1999 or when inventories are depleted.*

### KODABROMIDE Paper\*

Fast graded paper for commercial, industrial, press, and professional use.

- Primary features:
  - Surface (base tint, texture and sheen):  
F-Smooth, glossy
  - Contrast: (2) medium, (3) hard, (4) extra hard, and (5) ultra hard
  - Support: Single weight, fiber-base
  - Image Tone: Neutral black
  - High speed, wide exposure latitude
  - Short exposure times
- Suggested applications:
  - Advertising/Commercial
  - Corporate/Industrial
- Processing (For tray):
  - Recommended KODAK Developers: (tray) DEKTOL, POLYMAX T
- Safelight: KODAK OC Safelight Filter (light amber)

**Note:** For more information, see KODAK Publications G-8 and E103BP.

*\*To be discontinued by year end 1999 or when inventories are depleted.*

# KODAK CHEMICALS

## DEVELOPERS AND REPLENISHERS FOR BLACK-AND-WHITE NEGATIVE FILMS

### TANK OR TRAY PROCESSING

#### KODAK Developer D-19

High-contrast developer for use primarily for scientific applications with Kodak spectroscopic films and plates, KODAK High Resolution Plates, and other special films.

- High capacity, clean working, fast acting
- Powder form
- To make 1 or 5 gallons

#### KODAK Developer DK-50

Moderately fast developer for films such as KODAK Commercial and sheet sizes of PLUS-X Pan Professional Films. Excellent for portrait and commercial work.

- Clean working, moderately fast
  - Powder form
  - Use straight or dilute 1:1
  - Provides normal contrast, average to slightly higher than average graininess
  - To make 1, 3 1/2, or 10 gallons
- Note:** For more information, see KODAK Publication E103CF.

#### KODAK Replenisher DK-50R

Increases capacity of Developer DK-50. Suitably packaged for home darkroom use.

- To make 1 gallon
- Powder form

#### KODAK Developer D-76

For general-purpose use with films such as KODAK T-MAX Professional, PLUS-X Pan, and TRI-X Pan Films; also for some spectroscopic films and plates. A favorite of pictorial photographers.

- Yields full emulsion speed and maximum shadow detail with normal contrast
  - Moderately fine grain, excellent development latitude
  - For normal or push processing of roll and sheet films
  - Supplied in powder form
  - To make 1 quart; 1/2, 1, or 10 gallons
- Note:** For more information, see KODAK Publications J-78 and E103CF.

#### KODAK Replenisher D-76R

Used to replenish KODAK Developer D-76 tank solutions.

- Supplied in powder form
  - To make 1 gallon
- Note:** For more information, see KODAK Publication J-78.

#### KODAK HC-110 Developer

Concentrated liquid developer for rapid development of most black-and-white films. Suitable for scientific, technical, commercial, industrial, and press photography. Negative quality is similar to that produced with KODAK Developer D-76 but with shorter development times.

- Highly active
- Extremely versatile; easy-to-use liquid concentrate
- Can be used in both replenished and non-replenished systems
- For normal or push processing of roll and sheet films
- To make 2 or 3 1/2 gallons of Dilution A

**Note:** For more information, see KODAK Publications J-24 and E103CF.

#### KODAK HC-110 Developer Replenisher

Increases capacity of KODAK HC-110 Developer tank solutions.

- Liquid
  - To make 1 gallon
- Note:** For more information, see KODAK Publications J-24 and E103CF.

#### KODAK MICRODOL-X Developer

Low fog level with films such as KODAK VERICHROME Pan, PLUS-X Pan, TRI-X Pan, and T-MAX Professional Films.

- In liquid or powder form
- Produces fine grain and a high degree of sharpness, maximum enlargement
- For most roll and sheet films
- Low sludging tendency
- Produces a slightly brownish image tone
- Powder to make 1 quart; 1 or 5 gallons, or 1-quart liquid, working strength

**Note:** For more information, see KODAK Publication E103CF.

#### KODAK MICRODOL-X Replenisher

Used to replenish KODAK MICRODOL-X Developer tank solutions.

- To make 1 gallon
- Powder form

#### KODAK T-MAX Developer

A conventional or push-process developer for use with KODAK T-MAX Professional, TRI-X Pan, and PLUS-X Films in rolls. Allows exposing film at normal or higher EI while producing less grain than current popular push-process developers. Ideal for small tanks and rotary-tube processors.

- Designed for non-replenished systems
- Produces enhanced shadow detail
- Liquid concentrate for easy mixing
- Stock only one chemical for normal/conventional and push-processing
- For use with roll films only (for sheet films, use KODAK T-MAX RS Developer and Replenisher)
- To make 1 or 5 gallons

**Note:** For more information, see KODAK Publications J-86 and E103CF.

#### KODAK T-MAX 100 Direct Positive Film Developing Outfit

Produces positive black-and-white slides from KODAK T-MAX 100 Professional Film and KODAK Technical Pan Film.

- For use in small and large tanks and rotary-tube processors
- 1-quart size

**Note:** For more information, see KODAK Publication J-87.

## KODAK T-MAX RS

### Developer and Replenisher

Moderately active two-part liquid film developer for replenished systems or processors. Recommended for T-MAX Films and Plates. Can be used for normal or push processing of roll and sheet films.

- Promotes enhanced shadow detail
- Excellent storage characteristics for longer solution life
- Can be used in trays, sink lines and rack-and-tank processors
- Can be used as a one-shot solution or a self-replenisher
- Supplied in liquid form for easy mixing
- To make 1 or 10 gallons

**Note:** For more information, see KODAK Publications J-86 and E103CF.

## KODAK TECHNIDOL Liquid Developer

For producing pictorial negatives with KODAK Technical Pan Films. Produces excellent uniformity with all Technical Pan Films and Technical Pan Plates. Recommended for use with 135- and 120-size films, sheet films, and plates.

- Exceptionally fine grain, high degree of sharpness, enhanced edge effects
- Each packet of liquid makes 8 ounces of solution

**Note:** Note: For more information, see KODAK Publications P-255 and E103CF.

## KODAK XTOL Developer

Two-part powder developer. Offers full emulsion speed and easy mixing. For use as both a developer and a replenisher. For use in small tanks, rotary-tube processors, and high-volume processors.

- Ascorbic acid based developer offers very high image quality at full emulsion speed
- Convenient, room-temperature mixing
- Stable performance through a wide range of temperatures and dilutions
- Excellent keeping properties
- Fine grain and high sharpness
- Provides more emulsion speed (shadow detail) than most developers for normal and push processing
- To make 1, 5, or 50 litres

**Note:** For more information, see KODAK Publications J-109 and E103CF.

## MACHINE PROCESSING

### KODAK DURAFLO RT Developer Replenisher

For processing black-and-white films in roller-transport processors.

- Long storage life
- Clean solution
- Produces fine grain
- Good sheet-film transport
- Liquid
- To make 20 gallons (5-gallon flexible containers, Parts A and B)

### KODAK DURAFLO RT Developer Starter

For preparing working solution from DURAFLO RT Developer Replenisher.

- To start 22 gallons (1-quart bottle)

**Note:** For more information, see KODAK Publication E103CF.

### KODAK VERSAMAT Developer Replenisher, Type A

For aerial films or high-contrast negatives. Designed for roller-transport processors.

- To make 20 gallons

### KODAK VERSAMAT Developer Starter, Type A

Starter solution for KODAK VERSAMAT Developer Replenisher, Type A.

- To start 8 1/2 gallons (24-ounce bottle)

### KODAK VERSAMAT 641 Developer Replenisher

For aerial films or medium-contrast results. Used with KODAK VERSAMAT 641 Developer Starter in KODAK VERSAMAT Processors or similar roller-transport processors.

- Powder form
- To make 20 gallons

### KODAK VERSAMAT 641 Developer Starter

Starter solution for KODAK VERSAMAT Developer Replenisher 641.

- To make 9 1/2 gallons

### KODAK VERSAMAT 885 Developer Replenisher

For aerial films or medium-contrast results. For processing in KODAK VERSAMAT Processors or similar roller-transport processors.

- Liquid form
- To make 60 litres

### KODAK VERSAMAT 885 Developer Starter

Starter solution for KODAK VERSAMAT Developer Replenisher 885.

- To make 34 litres

## CHEMICALS FOR BLACK-AND-WHITE PAPERS

## DEVELOPERS FOR TRAY PROCESSING

### KODAK DEKTOL Developer

For producing neutral and cold-tone images with cold-tone papers and warm tones with warm-tone papers.

- High capacity
- Powder
- Long shelf life
- Uniform development rate, good keeping qualities
- Unusually free from muddiness, sludge, precipitation, and discoloration
- Dilute 1:2 for use
- To make 1 quart; 1/2, 1, 5, or 25 gallons

**Note:** For more information, see KODAK Publication E103CP.

### KODAK EKTAFLOR Developer, Type 2

Produces warm-tones with warm tone papers. Noncarbonate.

- Medium contrast, high capacity, fast acting
- Designed for tray processing
- Liquid
- Dilute 1:9 for use
- 1-gallon flexible container

**Note:** For more information, see KODAK Publication E103CP.

## **KODAK EKTONOL Developer**

For tray processing warm-tone papers .  
Non-carbonate developer.

- Medium contrast
- Minimizes stain on prints to be toned
- Remains practically uniform throughout useful life, holding image tone constant from print to print
- Supplied in powder form
- To make 1 gallon

**Note:** For more information, see KODAK Publication E103CP.

## **KODAK POLYMAX T Developer**

Liquid developer-concentrate for producing neutral or cold tones with cold-tone papers.

- Medium contrast, high capacity, fast acting
- Dilute 1:9 for use
- 1-gallon cube or 1-quart bottle

**Note:** For more information, see KODAK Publications J-5 and E103CP.

## **KODAK SELECTOL-SOFT Developer**

For softer, lower contrast on most papers without sacrificing tonal scale. Useful for lowering the contrast of graded paper, approximately  $\frac{1}{2}$  grade.

- Excellent for portrait prints
- Designed for tray processing
- Powder form
- Dilute 1:1 for use
- To make 1 gallon

**Note:** For more information, see KODAK Publication E103CP.

## **DEVELOPERS FOR MACHINE PROCESSING**

**ALSO SEE "OTHER CHEMICALS FOR BLACK-AND-WHITE PAPERS."**

## **KODAK POLYMAX RT Developer and Replenisher**

Recommended for use with the KODAK POLYMAX IR Paper Processor and other roller-transport or continuous processors. For continuous processing of cold-tone papers.

- No developer starter required
- Compatible with fiber-base and RC papers
- Use as a tank solution and as a replenisher
- Liquid concentrate
- Dilute 1:4 for use
- To make 25 litres (5-litre container) or to make 25 gallons

**Note:** For more information, see KODAK Publications J-85 and E103CP.

## **KODAK Developer Starting Solution**

Required for making fresh working developer solution from KODAK SELECTOMAT Developer Replenisher.

- Can also be used with KODAK XTOL Developer in a replenished system
- 1 quart

## **KODAK SELECTOMAT Developer Replenisher**

For continuous or tray processing of warm-tone papers such as KODAK EKTALURE Paper. Requires KODAK Developer Starting Solution.

- To make 25 gallons

## **OTHER CHEMICALS FOR BLACK-AND-WHITE PAPERS**

## **KODAK EKTAMATIC Chemicals**

For processing Kodak stabilization-type papers, such as KODAK EKTAMATIC SC Paper.

### **KODAK SII Activator**

Use with KODAK EKTAMATIC SC Paper and KODAK SII Phototypesetting Paper.

- Ready to use
- 1-quart bottle or 2  $\frac{1}{2}$ -gallon flexible container

### **KODAK EKTAMATIC S30 Stabilizer**

Use with KODAK EKTAMATIC SC Paper.

- Ready to use
- 1-quart bottle or 2  $\frac{1}{2}$ -gallon flexible container

## **KODAK ROYALPRINT Chemicals**

Use in the KODAK ROYALPRINT Processor, Model 417, for processing water-resistant, developer-incorporated papers such as KODAK POLYMAX II RC, POLYCONTRAST III RC, KODABROME II RC, and PANALURE SELECT RC Papers. Ready to use.

## **KODAK ROYALPRINT Activator KODAK ROYALPRINT Stop Bath**

Available in cases for batch use or flexible containers for use with the KODAK ROYALPRINT Replenishment Assembly.

- Case contains chemicals for two processor charges
- One charge processes 1000 8 x 10-inch prints or equivalent (556 square feet), or is usable for one week, whichever occurs first
- Activator in 5-gallon flexible container
- Stop Bath in 2  $\frac{1}{2}$ -gallon flexible container

## KODAK ROYALPRINT Fixer and Replenisher

- Reduces crystal buildup
- Each batch processes 1000 8 x 10-inch prints or equivalent (556 square feet), or is usable for one week, whichever occurs first
- To make 5 gallons (1 1/4-gallon bottle of concentrate)
- 20 gallons (5-gallon flexible container) for use with the KODAK ROYALPRINT Replenishment Assembly

### STOP BATHS, FIXING BATHS, HARDENERS

## TANK OR TRAY PROCESSING

### KODAK EKTAFLU Stop Bath

For use with KODAK POLYMAX T Developer and POLYMAX T Fixer. Can also be used for film.

- Liquid concentrate with built-in color indicator to signal exhaustion
- Dilute 1:31 for use
- Also for use with film
- 1-gallon flexible container

**Note:** For more information, see KODAK Publications E103CF and E103CP.

### KODAK Indicator Stop Bath

Non-hardening general-purpose stop bath for use with papers, plates, or films.

- Contains an indicator to signal exhaustion
- Dilute 1:63 for use
- Liquid concentrate
- To make 8 or 64 gallons

**Note:** For more information, see KODAK Publications E103CF and E103CP.

### KODAK 28% Acetic Acid

For use with photographic retouching. Also used to prepare a stop bath for film or paper processing.

- Carefully prepared, purified, and tested for photographic use
- 16 ounces

### KODAFIX Solution

General-purpose single-solution concentrated hardening fixer.

- Long life, high capacity
- Dilute 1:7 for use with paper
- Dilute 1:3 for use with film
- Liquid to make 1 gallon for film
- Liquid to make 2 gallons for paper

**Note:** For more information, see KODAK Publication E103CF.

## KODAK Fixer

A general-purpose hardening fixer for films, plates and papers.

- Mixes to working strength
- Powder to make 1 quart; 1/2, 1, or 5 gallons

**Note:** For more information, see KODAK Publications E103CF and E103CP.

## KODAK POLYMAX T Fixer

Single-solution hardening fixer for papers or films. Designed for use with KODAK POLYMAX T Developer and other developers.

- Dilute 1:7 for use with paper
- Dilute 1:3 for use with film
- Liquid

- 1-gallon cube or 1-quart bottle

**Note:** For more information, see KODAK Publications J-5, E103CF and E103CP.

## KODAK Rapid Fixer

Rapid-acting fixer for papers, films and plates, with optional hardener for machine or manual processing.

Particularly recommended if prints tend to stick to belt or drum dryers, or become softened in toning operations. Consists of two liquid concentrates: Solution A (the fixer concentrate) and Solution B (the hardener concentrate).

- Complete fixer: Solutions A and B (to make 1 or 5 gallons)
- Separate units (Part A: 5 gallon flexible container, 30 or 52-gallon drums; Part B: 72-ounce bottle or 5-gallon flexible container)

**Note:** For more information, see KODAK Publications E103CF and E103CP.

## KODAK Liquid Hardener

For preparing an acid hardening fixing bath or stop bath for films and papers.

- For use after toning
- Dilute 1:13 for use
- 1-gallon jug

## MACHINE PROCESSING

### ALSO SEE "OTHER CHEMICALS FOR BLACK-AND-WHITE PAPERS."

## KODAK Hardening Fixer and Replenisher

For continuous processing of fiber-base black-and-white papers. Use with KODAK Stop-Fixer and Replenisher.

- Liquid to make 50 gallons

## KODAK POLYMAX RT Fixer and Replenisher

Liquid non-hardening fixer for processing of resin-coated papers in continuous or roller-transport processors.

- Dilute 1:3 for use
- To make 20 litres (5-litre container)

**Note:** For more information, see KODAK Publication E103CP.

## KODAK Stop-Fixer and Replenisher

For processing fiber-base papers in continuous processors. Use with KODAK Hardening Fixer and Replenisher.

- Liquid to make 30 gallons

## KODAK VERSAMAT Fixer and Replenisher, Type A

For processing black-and-white aerial or high-contrast films in roller-transport processors.

- Provides fast fixing
- To make 20 gallons; 5-gallon flexible container Solution A (Fixer); 72-ounce bottle Solution B (Hardener)

## KODAK VERSAMAT 641 Fixer and Replenisher

For processing black-and-white aerial or high-contrast films in KODAK VERSAMAT Processors or similar roller-transport processors.

- Powder form
- To make 20 gallons

## KODAK VERSAMAT 885 Fixer and Replenisher

For processing black-and-white aerial or high-contrast films in KODAK VERSAMAT Processors or similar roller-transport processors.

- Liquid form
- To make 75 litres

## MORE INFORMATION

Kodak has many publications to assist you with information on Kodak products, equipment, and materials.

Additional information is available on the Kodak website and through the U.S.A./Canada faxback system.

For the latest version of technical support publications for KODAK PROFESSIONAL Products, visit Kodak on-line at:  
**<http://www.kodak.com/go/professional>**

Many technical support publications for KODAK PROFESSIONAL Products can be sent to your **fax** machine from the Kodak Information Center. Call:

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Kodak Professional Division  
EASTMAN KODAK COMPANY

## Kodak Professional