# CHEMICALS FOR KODAK PROFESSIONAL BLACK-AND-WHITE FILMS

## KODAK PROFESSIONAL Film

<table>
<thead>
<tr>
<th>KODAK Chemicals</th>
<th>CONTINUOUS—</th>
<th>T-MAX 100 Professional</th>
<th>T-MAX 200 Professional</th>
<th>T-MAX 300 Professional</th>
<th>PLUS-X Pan Professional</th>
<th>T-MAX Pan Professional</th>
<th>TRI-X Pan</th>
<th>TRI-X Pan Professional</th>
<th>TECHNICA Pan</th>
<th>EKTAPAN</th>
<th>TECHNICA Professional Pan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer</td>
<td>XTOL</td>
<td>✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔</td>
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### Typical Dilution

- **full strength**
- **1:1, 1:2, 1:3**

### Solution Temperature (Time Range)

- **80 ± 0.5°F (26.5 ± 0.3°C)**

### For Use In

- **Stock or Concentrate Solution In Closed Container (Full)**
- **Working Solution In Tray/Tank**
- **8 x 10 Sheets per Gal/L in a Tray**

### Keeping Properties Without Use

- **Useful Capacity**

| Developer | XTOL Developer | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ | ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ ✔ |
| Stock or Concentrate Solution In Closed Container (Full) | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Working Solution In Tray/Tank | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 8 x 10 Sheets per Gal/L in a Tray | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

### Notes

- *Useful capacity can be increased by replenishment.
- † Keeping properties will vary depending on conditions of use.
- N/A = Not Applicable
- N/R = Not recommended
## MORE INFORMATION

### DEVELOPERS

<table>
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<tr>
<th>KODAK Chemical</th>
<th>Description</th>
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</table>
| KODAK XTOL Developer | • Suitable for all professional black-and-white films  
• Ascorbic acid developer  
• Very high image quality at full emulsion speed  
• Convenient room-temperature mixing  
• Fine grain and high sharpness  
• Stable performance through a wide range of temperatures, dilutions, and agitation methods  
• Provides better image quality/emulsion speed (shadow detail) than most developers for normal and push processing |
| KODAK T-MAX Developer | • Designed for non-replenished systems  
• Produces enhanced shadow detail  
• For use with roll films only  
• For normal or push processing |
| KODAK T-MAX RS Developer and Replenisher | • Recommended for replenished systems  
• For normal or push processing of roll and sheet films  
• Produces enhanced shadow detail |
| KODAK Developer D-76 | • For general use  
• Yields full emulsion speed and good shadow detail with normal contrast  
• Replenish with KODAK Replenisher D-76R  
• For normal or push processing |
| KODAK HC-110 Developer | • Produces results similar to those produced by KODAK Developer D-76  
• Highly concentrated liquid  
• Replenish with KODAK HC-110 Developer Replenisher  
• For normal or push processing |
| KODAK MICRODOL-X Developer | • Produces fine grain and a high degree of sharpness  
• Produces a slightly brownish image tone  
• Replenish with KODAK MICRODOL-X Replenisher  
• For most roll and sheet films |
| KODAK Developer DK-50 | • Moderately fast developer that can be used straight or diluted 1 part concentrate to 1 part water  
• Provides normal contrast, average to slightly higher than average graininess  
• Replenish with KODAK Replenisher DK-50R  
• Available in powder form |

### Description

- **KODAK Developer D-19**:  
  - Provides higher than normal contrast and speed, higher than average grainlessness  
  - Available in powder form

- **KODAK TECHNIDOL Liquid Developer**:  
  - Produces exceptionally fine grain  
  - For use with KODAK Technical Pan Films  
  - Yields a high degree of sharpness, and images with enhanced edge effect

- **KODAK DURAFLO RT Developer Replenisher**:  
  - Designed for roller-transport processors  
  - Replenished system  
  - Produces fine grain  
  - Long storage life  
  - Good sheet-film transport

- **KODAK XTOL Developer**:  
  - For use with KODAK Technical Pan Films  
  - Produces exceptionally fine grain

- **KODAK RT Developer Replenisher**:  
  - Produces better image quality/emulsion speed (shadow detail) than most developers for normal and push processing

### WASHING AID

<table>
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| KODAK Hypo Clearing Agent | • Promotes removal of fixer from films and fiber-base papers to shorten wash times and make washing at lower wash-water temperatures practical  
• Dilute 1 part stock solution to 4 parts water  
• Available as a powder |

### DRYING AID

<table>
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| KODAK PHOTO-FLO Solution | • Decreases water-surface tension  
• Minimizes water marks and streaks on film  
• Promotes faster, more uniform drying |

### STOP BATHS

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| KODAK Indicator Stop Bath | • Non-hardening, general-purpose stop bath for use with films and papers  
• Contains an indicator to signal exhaustion  
• Dilute 1 part concentrate with 63 parts water  
• Liquid concentrate |

- **KODAK EKTAFLO Stop Bath**:  
  - A liquid concentrate with built-in color indicator to signal exhaustion  
  - Dilute 1 part concentrate with 31 parts water  
  - Also for use with paper

### FIXERS

<table>
<thead>
<tr>
<th>KODAK Chemical</th>
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</table>
| KODAK Fixer | • A general-purpose hardening fixer for films and papers  
• Available in powder form  
• Mixes to working strength |

- **KODAK Rapid Fixer**:  
  - A fast-acting hardening fixer  
  - For machine, tray, or tank processing  
  - Consists of two liquid concentrates: Solution A (the fixer concentrate) and Solution B (the hardener concentrate)  
  - For use with film and paper

- **KODAFIX Solution (or KODAK POLYMAX T Fixer)**:  
  - General-purpose, single-solution hardening fixer for films and papers  
  - Long life, high capacity  
  - Dilute 1 part concentrate to 3 parts water for use with film; 1 part concentrate to 7 parts water for use with paper  
  - Supplied as a liquid concentrate

### DIRECT POSITIVE OUTFIT

<table>
<thead>
<tr>
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</table>
| 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 or large tanks and rotary-tube processors |

* Use the mixed solution as a working tank solution or a replenisher.

† For greater sharpness, you can use this developer diluted 1:1. Using the diluted developer requires longer development times, which may result in a slight increase in graininess.

‡ For greater sharpness, you can use this developer diluted 1:3. Using the diluted developer requires longer development times which results in increases in graininess and film speed.

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If you have questions about KODAK PROFESSIONAL Products, call Kodak.

In the U.S.A.:  
1-800-242-2424, Ext. 19, Monday–Friday  
9 a.m.–7 p.m. (Eastern time)

In Canada:  
1-800-465-6325, Monday–Friday  
8 a.m.–5 p.m. (Eastern time)

Or contact Kodak on-line at:  
http://www.kodak.com/go/professional

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