

## Chemicals for KODAK PROFESSIONAL Black-and-White Films

KODAK PROFESSIONAL Chemicals	KODAK PROFESSIONAL Film					Typical Dilution (stock or concentrate: water)	Solution Temperature/ Time Range	Packaged Powder	Packaged Liquid Concentrate	For Use In	Keeping Properties Without Use		Useful Capacity	
	T-MAX 100 / 100TMX	T-MAX 400 / 400TMY	T-MAX P3200 / P3200TMZ	TRI-X 400 / 400TX	TRI-X 320 / 320TXP						Stock or Concentrate Solution in Closed Container (Full)	Working Solution in Tray/Tank	8 x 10 Sheets per Gal/L in a Tray	Tank
<b>DEVELOPER</b>														
Developer D-76	✓	✓	✓	✓	✓	full strength 1:1	65 to 75°F (18 to 24°C) See instructions packaged with product	✓		small or large tank, tray, rotary-tube, rack-and-tank	6 months NA	24 hours/1 month 24 hours/NR	16/4	16/4
T-MAX Developer	✓	✓	✓	✓	✓	1:4		✓		small or large tank, rotary-tube	6 months	NR/1 month	8/2	8/2
T-MAX RS Developer and Replenisher	✓	✓	✓	✓	✓	stock (working strength)		✓		small or large tank, tray, rotary-tube, rack-and-tank	Indefinite (conc) 6 months (working tank sol)	24 hours/1 month	NR	16/4*
XTOL Developer	✓	✓	✓	✓	✓	full strength 1:1		✓		small or large tank, tray, rotary-tube	6 months	24 hours/2 months	19/5	19/5
HC-110 Developer Dilution A Dilution B	✓	✓	✓	✓	✓	1:3 (A) 1:7 (B) from stock solution		✓		small or large tank, tray, rotary-tube, rack-and-tank	6 months (stock)	24 hrs/1 month (A) 12 hrs/2weeks (B)	20/5 (A) 10/2.5 (B)	40/10 (A) 20/5 (B)
<b>STOP BATH</b>														
Indicator Stop Bath	✓	✓	✓	✓	✓	1:63	65 to 70°F (18 to 21°C) 30 seconds	✓		small or large tank, tray, rotary-tube	Indefinite	3 days/1 month	discard when color changes to purplish/blue	
<b>FIXERS</b>														
Rapid Fixer	✓	✓	✓	✓	✓	1:3 plus Part B (hardener)	65 to 70°F (18 to 21°C) 2 to 10 minutes depending on film and fixer combination		✓	tanks, tray, machine	Indefinite	1 week/1 month	120/32	120/32
Fixer	✓	✓	✓	✓	✓	working strength see package		✓		small or large tank, tray, rotary-tube	2 months	1 week/1 month	100/26	100/26
KODAFIX Solution	✓	✓	✓	✓	✓	1:3		✓		small or large tank, tray, rotary-tube	Indefinite	1 week/1 month	120/32	120/32
<b>WASHING AID</b>														
Hypo Clearing Agent	✓	✓	✓	✓	✓	1:4 from stock solution	65 to 70°F (18 to 21°C) 1 to 2 minutes	✓		small or large tank, tray, rotary-tube, rack-and-tank	3 months	24 hours/1 month	50-60 (12-15) without pre-rinse;150-200 (35-50) with pre-rinse	
<b>DRYING AID</b>														
PHOTO-FLO Solution 200	✓	✓	✓	✓	✓	1:200	65 to 70°F (18 to 21°C) 30 seconds		✓	small or large tank, tray, rack-and-tank	Indefinite	Indefinite†	—	—

\* Useful capacity can be increased by replenishment.

† Keeping properties will vary depending on conditions of use.

NA = Not applicable

NR = Not recommended

<b>KODAK PROFESSIONAL Chemical</b>	<b>Description</b>
<b>DEVELOPERS</b>	
Developer D-76†	<ul style="list-style-type: none"> <li>For general use</li> <li>Yields full emulsion speed and good shadow detail with normal contrast</li> <li>Moderately fine grain, excellent development latitude</li> <li>For normal or push processing</li> </ul>
T-MAX Developer	<ul style="list-style-type: none"> <li>Designed for non-replenished systems</li> <li>Produces enhanced shadow detail</li> <li>For use with roll films only</li> <li>For normal or push processing</li> </ul>
T-MAX RS Developer and Replenisher*	<ul style="list-style-type: none"> <li>Recommended for replenished systems</li> <li>Produces enhanced shadow detail</li> <li>For normal or push processing of roll and sheet films</li> </ul>
XTOL Developer	<ul style="list-style-type: none"> <li>Suitable for most professional black-and-white films</li> <li>Ascorbic acid developer</li> <li>Very high image quality at full emulsion speed</li> <li>Convenient, room-temperature mixing</li> <li>Stable performance through a range of temperatures, dilutions, and agitation methods</li> <li>Fine grain and high sharpness</li> <li>Provides more emulsion speed (shadow detail) than most developers for normal and push processing</li> </ul>

<b>KODAK PROFESSIONAL Chemical</b>	<b>Description</b>
HC-110 Developer	<ul style="list-style-type: none"> <li>Extremely versatile</li> <li>Can be used in both replenished and nonreplenished systems</li> <li>Replenish with KODAK PROFESSIONAL HC-110 Developer Replenisher</li> <li>For normal or push processing</li> </ul>
<b>STOP BATHS</b>	
Indicator Stop Bath	<ul style="list-style-type: none"> <li>Non-hardening, general-purpose stop bath for use with films and papers</li> <li>Contains an indicator to signal exhaustion</li> <li>Dilute 1 part concentrate with 63 parts water</li> </ul>
<b>FIXERS</b>	
Rapid Fixer	<ul style="list-style-type: none"> <li>A fast-acting hardening fixer</li> <li>For machine, tray, or tank processing</li> <li>Consists of two liquid concentrates: Solution A (the fixer concentrate) and Solution B (the hardener concentrate)</li> <li>For use with film and paper</li> </ul>
Fixer	<ul style="list-style-type: none"> <li>A general-purpose hardening fixer for films and papers</li> <li>Mixes to working strength</li> </ul>
KODAFIX Solution	<ul style="list-style-type: none"> <li>General-purpose, single-solution hardening fixer for films and papers</li> <li>Long life, high capacity</li> <li>Dilute 1 part concentrate to 3 parts water for use with film; 1 part concentrate to 7 parts water for use with paper</li> </ul>

<b>KODAK PROFESSIONAL Chemical</b>	<b>Description</b>
<b>WASHING AID</b>	
Hypo Clearing Agent	<ul style="list-style-type: none"> <li>Promotes removal of fixer from films and fiber-base papers to shorten wash times and make washing at lower wash-water temperatures practical</li> <li>Dilute 1 part stock solution to 4 parts water</li> </ul>
<b>DRYING AID</b>	
PHOTO-FLO 200 Solution	<ul style="list-style-type: none"> <li>Decreases water-surface tension</li> <li>Minimizes water marks and streaks on film</li> <li>Promotes faster, more uniform drying</li> </ul>

\* 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.

Note: To obtain consistent results from KODAK powdered chemicals, mix the full volume marked on the package. Kodak supplies powdered photographic chemicals in a variety of sizes that make it easy to choose the volume you need. Therefore, we do not recommend mixing smaller-than-package-size amounts of powdered KODAK Processing Chemicals.

TM/MC/MR: D-76, HC-110, Photo-Flo, T-Max, Xtol

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