

KODAK Tri-X Pan Film / TX (Rolls)

Kodak Developer or Developer and Replenisher	Developing Time (Minutes)						
	Small Tank (Agitation at 30-second intervals)		Large Tank (Agitation at 1-minute intervals)*		Large Tank (Agitation at 1-minute intervals)*		
	65°F (18°C)	68°F (20°C)	70°F (21°C)	72°F (22°C)	75°F (24°C)	77°F (25°C)	75°F (24°C)
T-Max	7	6	6	5½	5	NR	NR
T-Max RS	7	6	5½	5½	5	NR	NR
D-76	9	8	7½	6½	5½	10	7
D-76 (1:1)	11	10	9½	9	8	12	11
DK-50 (1:1)	7	6	5½	5	4½	6½	6
HC-110 (Dil B)	8½	7½	6½	6	5	9½	8
Microdol-X	11	10	9½	9	8	13	12
Microdol-X (1:3)	NR	NR	NR	15	14	13	NR
Xtol (135)	7¾	6¾	6	—	4¾	9½	8
Xtol (120)	7½	6¼	5½	—	4¼	9	7½

KODAK Tri-X Pan Professional Film / TXP (Rolls)

Kodak Developer or Developer and Replenisher	Developing Time (Minutes)						
	Small Tank (Agitation at 30-second intervals)		Large Tank (Agitation at 1-minute intervals)*		Large Tank (Agitation at 1-minute intervals)*		
	65°F (18°C)	68°F (20°C)	70°F (21°C)	72°F (22°C)	75°F (24°C)	77°F (25°C)	75°F (24°C)
T-Max	9	8	7½	7	6½	NR	NR
T-Max RS	5	4	3½	3	3	5½	5
D-76	9	8	7½	7	6	10	9
DK-50 (1:1)	5¾	5½	5¼	4¾	3¾	7	6
HC-110 (Dil B)	11	10	9	8½	7½	12	11
Microdol-X	7½	6¼	5½	—	4½	9½	7½

KODAK Tri-X Pan Professional Film / TXT (Sheets)

Kodak Developer or Developer and Replenisher	Developing Time (Minutes)						
	Tray (Continuous agitation)		Large Tank (Agitation at 1-minute intervals)*				
	65°F (18°C)	68°F (20°C)	70°F (21°C)	72°F (22°C)	75°F (24°C)	77°F (25°C)	75°F (24°C)
T-Max RS	6	5	4	NR	NR	5½	4
D-76	6	5½	5	4½	4	7½	6
DK-50 (1:1)	5	5	4½	4	4	7	6
HC-110 (Dil B)	6	5½	5	4½	4	8	7
Microdol-X	8	7	6	5½	5	10	9
Xtol	7½	6½	5¾	—	4½	8½	7

* The recommendations for using Kodak Xtol Developer in a large tank are based on a nitrogen burst cycle of 2 seconds every 8 seconds.
 NR=Not recommended
 Bold type=Primary recommendations
 Note: Tank development times shorter than 5 minutes may produce unsatisfactory uniformity.

KODAK PROFESSIONAL High Speed Infrared Film / HIE

Kodak Developer or Developer and Replenisher	Developing Time (Minutes)						
	Small Tank (Agitation at 30-second intervals)		Large Tank (Agitation at 1-minute intervals)*		Large Tank (Agitation at 1-minute intervals)*		
	65°F (18°C)	68°F (20°C)	70°F (21°C)	72°F (22°C)	75°F (24°C)	77°F (25°C)	75°F (24°C)
T-Max	0.65	—	—	—	—	—	—
T-Max	0.80	—	—	—	—	—	—
T-Max	0.91	—	—	—	—	—	—
D-76	0.70	0.9½	8½	7½	7	6	10
HC-110 (Dil B)	0.80	6	5	5	4½	4	6½
D-19†	1.65	7	6	5½	5	4	8½
Xtol	0.65	8	6¾	6	—	5	11½
Xtol	0.75	9¼	7¾	7	—	5¾	13
Xtol (1-1)	0.58	—	—	—	—	—	—
Xtol (1-1)	0.65	—	—	—	—	—	—
Xtol (1-1)	0.75	—	—	—	—	—	—

KODAK EKTAPAN Film

Kodak Developer or Developer and Replenisher	Developing Time (Minutes)						
	Tray (Continuous agitation)		Large Tank (Agitation at 1-minute intervals)* †				
	65°F (18°C)	68°F (20°C)	70°F (21°C)	72°F (22°C)	75°F (24°C)	77°F (25°C)	75°F (24°C)
T-Max RS	6	5	4	4	3	6	5
D-76	9	8	7	6½	5½	11	10
DK-50 (1:1)	5	4½	4¼	4	3½	7	6
HC-110 (Dil A)	3¼	3	2¾	2½	2¼	4	3¾
HC-110 (Dil B)	5	4½	4¼	4	3½	7	6
Microdol-X	12	10	9½	8	7	16	13
Xtol	8½	7¼	6¾	5½	5	9½	8

KODAK Technical Pan Film / TP (Rolls)†

Kodak Developer	Developing Time (Minutes)		
	Small Tank (Agitation at 30-second intervals) §		Tray (Continuous agitation) §
	68°F (20°C)	77°F (25°C)	88°F (30°C)
TECHNIDOL Liquid	9	7½	6½

KODAK Technical Pan Film / TP (Sheets)†

Kodak Developer	Developing Time (Minutes)	
	Tray (Continuous agitation) §	
	68°F (20°C)	88°F (30°C)
TECHNIDOL Liquid	8	6½

* The recommendations for using Kodak Xtol Developer in a large tank are based on a nitrogen burst cycle of 2 seconds every 8 seconds.
 † Use only Kodak HC-110 Developer (Dilution B) to process long rolls of film on spool reels, and add 1 minute to the times given in the table.
 § See the developer or film instructions for special agitation procedure.
 Bold type=Primary recommendations
 Note: Tank development times shorter than 5 minutes may produce unsatisfactory uniformity.