PROCESSING

Kodak black-and-white film

Small Tank Processing, Intermittent Agitation for Tanks That Can Be Inverted								
				ROLL	FILMS			
				Development Ti	me (Minutes)			
KODAK Film		Film Code	· · · · · · · · · · · · · · · · · · ·			24°C (75°F)		Reference
			KODAK PROFESSIONAL XTOL Developer	KODAK PROFESSIONAL D-76 Developer	KODAK HC-110 Developer (Dilution B)	KODAK PROFESSIONAL T-MAX Developer (1:4)	Comments	Publication
KODAK PROFESSIONAL T-MAX 100 **Max 100 **		100TMX	7 1/2	61/2	6	6 1/4		F-4016
KODAK PROFESSIONAL T-MAX 400		400TMY	6 1/2	7 1/2	5 1/2	5 1/2		F-4043
KODAK	EI 400	1	9 1/2	10 1/2	7 1/2	61/2		
PROFESSIONAL	EI 800		10 1/2	11 1/2	8 1/2	7 1/2		
T-MAX P3200	EI 1600		11 1/2	12 1/2	9 1/4	8		F-4016
119310				14	10 1/2	9 1/2		
Kodak Professional	El 6400		15 1/4	15 1/2	12	11		
Kodak Professional T-HAX P3260 FILM P3200 VILM X AVERAGE PARTICIPATION P3200 P3200	El 12,500		17 1/4			12		
P3200 MAX	El 25,000		19			13 1/2		
125 125	M88 07 08 28 125PX B&W	125PX	(135) 5 1/2 (120/220) 6	5 1/2	31/2	4 1/4		F-4018
ip.	MYSS OZ	320TXP	7 3/4	9	4 3/4	5 1/4	Also T-MAX Developer for 7 1/4 minutes at 20°C (68°F)	F-4017
Kodak Professional Talia 400 Plan A ACC S WITH MODERN TRAN A ACC S W	SSIONAL W88 OZ WMSB AMOUNT B&W	400TX	7	6 3/4	3 3/4	4 3/4	Also D-76 Developer (1:1) for 9 3/4 minutes at 20°C (68°F)	F-4017

Tray Processing							
SHEET FILMS							
		Development Time (Minutes)					
KODAK E'L	Film	20°C (68°F)			24°C (75°F)	C	Reference
KODAK Film	Code	KODAK PROFESSIONAL XTOL Developer	KODAK PROFESSIONAL D-76 Developer	KODAK HC-110 Developer (Dilution B)	KODAK PROFESSIONAL T-MAX RS Developer and Replenisher (1:4)	Comments	Publication
KODAK PROFESSIONAL T-MAX 100	100TMX	6 3/4	5 3/4	51/2	5 3/4		F-4016
KODAK PROFESSIONAL T-MAX 400	400TMY	6	6 3/4	5 1/4	4		F-4043
KODAK PROFESSIONAL TRI-X 320	320TXP	6	6	3 1/4	NR	Also DK-50 Developer (1:1) for 5 minutes at 20°C (68°F)	F-4017

Final Steps in Processing Black-and-White Film						
Step/Solution	Time (min:sec)	Temperature	Comments			
Rinse/stop bath	0:30	18 to 24° C (65 to 75° F)	Agitate continuously. Rinse with a stop bath.			
Fix	2:00 to 4:00* with KODAK Rapid Fixer -OR- 5:00 to 10:00* with other fixers		Agitate continuously for the first 30 seconds and at 30-second intervals after that with a hardening fixer. Fix for twice as long as it takes the film to clear (lose its milky appearance). IMPORTANT: With KODAK PROFESSIONAL T-MAX Films, fixer will be exhausted more rapidly than with other films. If negatives show a magenta (pink) stain after fixing, fixer may be near exhaustion, or fixing time is too short. If the stain is pronounced and irregular, refix the film in fresh fixer.			
Rinse	0:30		Rinse the film in the tank under running water.			
Wash aid	1:00 to 2:00		Treat with KODAK PROFESSIONAL Hypo Clearing Agent. Agitate continuously for the first 30 seconds and then at 30-second intervals.			
Wash	5:00		Run the wash water at least fast enough to provide a complete change of water in the container in 5 minutes.			
Final rinse/ wetting agent	0:30		To minimize drying marks, treat the film with KODAK PHOTO-FLO Solution			
Dry			Dry in a dust-free place.			
* Times are approximate. Refer to the film or developer instructions.						

These are starting-point recommendations for processing KODAK PROFESSIONAL Black-and-White Films with KODAK PROFESSIONAL Chemicals. For best results, you should make tests to determine the best development time for your application.

NOTE: Development times shorter than 5 minutes may produce unsatisfactory uniformity.



www.kodak.com/go/bwFilms or www.kodak.com/go/professional