


ILFORD FILM PROCESSING CHART

20°C/68°F	PAN F PLUS					FP4 PLUS				HP5 PLUS					100 DELTA PROFESSIONAL					DELTA 400 PROFESSIONAL 					DELTA 3200 PROFESSIONAL					SFX 200								
	EI	25	50	100	200	50	125	200	400	200	400	800	1600	3200	25	50	100	200	400	250	320	400	500	800	1600	3200	400	800	1600	3200	6400	12500	200	400	800			
ILFOTEC DD-X 1+4	7	8				8	10	12		7½	9	10	13	20	9½	12	14					9½	10½	13½	18	6	7	8	9½	12½	17	10	14					
ID-11 1+0	6½	6½				6½	8½	10		7½	10½	14			7	8½	10½					9½	11½	14½	19	7	8	9½	10½	13	17	10	14	18				
1+1	8½	8½				8	11	15		13	16½				10	11	13					14	17½									17						
1+3	14	15				17	20			20					15	20																						
ILFOTEC HC 1+15								5			5	7½	12½															5	8	13		5	7	10½				
1+31						6	8	9		6½	9½	14			5	6	8				7½	10	13½			6	7½	9	14½		9	13	19					
1+47		5½				8	12			9					5½	7½	10										14½											
ILFOSOL S 1+9						6½	7½			7	8½	14			6						9	14				6½	8	10½	13			9½	11½	19				
1+14		6				7½	9½			9½	14				6½	10																13	19					
MICROPHEN 1+0			8	12		8	9	15½		6½	8	11	16		6½	8	10					7½	8½	10½	14	6	7	8	9	12	16½	8½	10½	14½				
1+1	6	6				10	14			12	15				10	14						13½	15½	19								15½	19					
1+3	11	11				14	18			23					14	20																						
PERCEPTOL 1+0	9	14				9	12			11	11				9	12	15				12						11	13	15	18			14½					
1+1	10½	15				13	15			15					13	17					15½											20						
1+3	15	17				17	21			25					16	22																						
ACUFINE 1+0							6				6½	9½				5½																						
RODINAL 1+25		6				9	13			6	8				7	9					9					5½	7	9	11	20								
1+50		11				15	20			11					10	14					20																	
D-76 1+0	6½	6½				6	8	9		7½	9½	12½			7	9	11				9½	11½	14½	19	7	8	9½	10½	13	17	10	12½	16½					
1+1	10½	10½				9	11	15		11	13				9½	12	14				14	17½										14½						
1+3	15½	15½				14	16	20		22					14	22																						
HC 110 A 1+15							6					5½	9½															5	8	13		5						
HC 110 B 1+31						6	9	12		5	7½	11			5	6	8				7½	10	13½			6	7½	9	14½		9							
MICRODOL-X 1+0	12	15				10	15			11					12	15					13½					10	11½	13	18									
1+3	15	18				17	23			25					16	22																						
T-MAX 1+4						8	9			6½	8	9½	11½		6	7	8									7	8½	10½	13½	5½	6½	7½	8½	11	14	8½	10½	12½
XTOL 1+0	6	7	8	9	6½	8	9	11	7½	8½	10½	13	17½	6¾	6¾	8	9½	11½							8½	10	13	17	5	6	6½	7½	10	12½	11	14		
1+1	6¾	7¾	9½	11¼	8½	10	12	14½	10¼	12	14¼	18	22½	9	9	10½	12	14							13	15½	20							15	19			
1+3	10½	12	13½	15¾	12½	14¾	17	20	14½	18	23	27½		13½	13½	15½	17½	20½																24				

DEVELOPMENT TIMES

Follow the recommended times in the chart for the film/developer combination of your choice.

CAUTION:

These times are intended as a **guide only**. Times shorter than 5 minutes risk uneven development and are not recommended.

AGITATION

Intermittent agitation is recommended for use in spiral tanks and deep tanks. With spiral tanks, invert the tank four times during the first 10 seconds, then invert the tank four times again during the first 10 seconds for each further minute. Continuous agitation is recommended in dishes/trays. Otherwise, follow the recommendations given by the processing equipment manufacturer.

FIXATION

After development, rinse the film in water or ILFORD ILFOSTOP or ILFOSTOP PRO stop bath (1+19) for 30 seconds at 20°C/68°F, and fix in ILFORD HYPAM or ILFORD UNIVERSAL RAPID fixer (1+4) for 2–5 minutes at 20°C/68°F.

WASHING

Where a non-hardening fixer, such as HYPAM or UNIVERSAL RAPID, has been used, wash the film in running water for 5–10 minutes at a temperature within 5°C/9°F of the processing temperature.

Some products in this chart may not be available in your country.

For further information on ILFORD products visit our web site on: www.ILFORD.com