

NANIWA C O L O R - K I T N 1 L USE

(Color Developing Kit For Color Negative Film)

①. CONTENTS OF THE KIT:

1. Color Developer 1 L use (500 ml x 2)  
PART A --- two bottles of liquid (160 ml net)  
PART B --- two bags of dry chemical
2. Bleach-Fixer 1 L use  
PART A --- a bottle of liquid (260 ml net)  
PART B --- a bottle of liquid (260 ml net)

②. TO PREPARE:

Use vessels separately for each solution.

1. Color Developer:

Dilute the contents of two bottles of PART A with 600 ml of water (86° - 104°F, 30° - 40°C), add the contents of two bags of PART B and stir well. After the chemicals are dissolved completely, add sufficient water to make 1 liter of working solution. (light pink)  
(In case of making 500 ml of working solution, start with 300 ml of warm water and dissolve one bottle of PART A and one bag of PART B in the same way.)

2. Bleach-Fixer :

Dilute the contents of the bottle of PART A with 400 ml of water (86° - 104°F, 30° - 40°C), add the contents of the bottle of PART B and stir well, add sufficient water to make 1 liter of working solution. (dark brown)  
(In case of making 500 ml of working solution, use 200 ml of warm water to dilute half quantity of PART A and PART B in the same way.)

STORAGE LIFE OF SOLUTIONS:

Unused, stored in cool and dark place in the tightly stoppered bottles.

Color Developer --- about 10 days

Bleach-Fixer --- " 3 weeks

But, it is advisable that to make working solutions just before use.

PROCESSING CAPACITY OF SOLUTIONS: (per 1 L)

Size	135-12EX	135-24EX	135-36EX	120
Rolls	30	20	16	10

3. PROCESSING PROCEDURE:

1. Processing Table

Step	Standard Process		High Temperature Process		Light
	Temperature	Time	Temperature	Time	
1. Color Developer	86 ± 0.5°F (30 ± 0.3°C)	* 5' 30"	100 ± 0.4°F (38 ± 0.2°C)	* 3' 15"	Under total darkness
2. Bleach-Fix	86 ± 4.0°F (30 ± 2.0°C)	* 6' 45"	100 ± 4.0°F (38 ± 2.0°C)	* 5' 00"	
3. Wash (Running water)	77 - 104°F (25 - 40°C)	3' 15"	77 - 104°F (25 - 40°C)	3' 15"	Under room light
4. Dry	below 104°F (40°C)	—	below 104°F (40°C)	—	
Total Time		15' 30"		11' 30"	

Processing time for color developer and bleach-fix includes 15 seconds for drain. Be careful not to let even a bit of bleach-fixer get into color developer because it may cause fog or yellow stains.

For the purpose of stabilizing, make stabilizer solution (5 ml of Formalin combined with 5 ml of Niwaducks (Wetting Agent) into 1 liter of water).

Processing time is one minute in the stabilizer between wash and dry.

2. Sensitizing Process for ASA 400 Film

Step	Temperature	Sensitizing Ratio, Time		Light
		x 2 (ASA 800)	x 4 (ASA 1600)	
1. Color Developer	100 ± 0.4°F (38 ± 0.2°C)	* 5' 00"	* 7' 00"	Under total darkness
2. Bleach-Fix	100 ± 4.0°F (38 ± 2.0°C)	* 5' 00"	* 5' 00"	
3. Wash (Running water)	77 - 104°F (25 - 40°C)	3' 15"	3' 15"	Under room light
4. Dry	below 104°F (40°C)	—	—	
Total Time		13' 15"	15' 15"	

\* Processing time for color developer and bleach-fix includes 15 seconds for drain.

Sensitizing Ratio should be doubled when you need the quality of picture. Sensitizing Ratio should be quadrupled when you need intensifying effect more than the quality of picture and graininess.

Please avoid sensitizing process stronger than these of the afore-mentioned processing, because any wrong processing should impair such characteristics as graininess, color balance and contrast.

### 3. Processing in the small-size developing tank

The small-size developing tank should be used in the under-mentioned way. The solution temperature inside the tank must be maintained and regulated at the specified temperature.

Watch the temperature if you use a deep tray which contains the water of fixed temperature. The depth of fixed temperature water should be controlled so that it can be as deep as the solution inside the tank.

Continue stirring for the first 30 seconds only. Put the tank into the warm water for 25 seconds beforehand. After that, take out the tank and stir for 5 seconds. (Put the tank up side down twice if the tank is so made.) Then put the tank back into the water. Repeat this several times within the limited time.

Frequency of stirring should be increased or decreased according to situations. Each solution should be stirred for the first 15 seconds continuously. Then stir every 15 seconds.

### 4 Compensation of Color Developing Time.

This is the processing table. Please prolong color developing time in accordance with the quantity of film to be developed, referring to the table as under.

Process Film	Std.	H.T.	Std.	H.T.	Std.	H.T.	Std.	H.T.	Std.	H.T.	Total
110/20EX	1 - 4 (rolls)		5 - 8 (rolls)		9 - 12 (rolls)		13 - 16 (rolls)		17 - 20 (rolls)		20 (rolls)
	5' 30"	3' 15"	5' 45"	3' 20"	6' 00"	3' 25"	6' 30"	3' 35"	7' 00"	3' 50"	
135/12EX	1 - 3 (rolls)		4 - 6 (rolls)		7 - 9 (rolls)		10 - 12 (rolls)		13 - 15 (rolls)		15 (rolls)
	5' 30"	3' 15"	5' 45"	3' 20"	6' 00"	3' 25"	6' 20"	3' 35"	6' 50"	3' 50"	
135/24EX	1 - 2 (rolls)		3 - 4 (rolls)		5 - 6 (rolls)		7 - 8 (rolls)		9 - 10 (rolls)		10 (rolls)
	5' 30"	3' 15"	5' 45"	3' 20"	6' 00"	3' 25"	6' 30"	3' 35"	7' 00"	3' 50"	
135/36EX	1 - 2 (rolls)		3 - 4 (rolls)		5 - 6 (rolls)		7 - 8 (rolls)				8 (rolls)
	5' 30"	3' 15"	5' 50"	3' 20"	6' 20"	3' 30"	6' 50"	3' 45"			
1 2 0	1 (rolls)		2 (rolls)		3 (rolls)		4 (rolls)		5 (rolls)		5 (rolls)
	5' 30"	3' 15"	5' 45"	3' 20"	6' 00"	3' 25"	6' 20"	3' 35"	6' 50"	3' 50"	
2 2 0	1 (rolls)		2 (rolls)		3 (rolls)						3 (rolls)
	5' 30"	3' 15"	5' 55"	3' 25"	6' 30"	3' 40"					

### 5 CAUTION

1. Be very careful not to let the solutions get into your eyes or mouth. If it should get into your eyes or mouth, wash it away immediately with plenty of water or gargle it out. (Medical treatment might be necessary if it is serious.)
2. A touch of the solutions on your skin might cause inflammation or soil the clothes. So in case of contact, wash it off with a large quantity of water.
3. Please stock this article within no easy reach of children or where it is not misused.