

# **TETENAL**

## **COLORTEC<sup>®</sup> C-41**

**RAPID NEGATIVE KIT  
NEGATIV KIT RAPID  
KIT NEGATIF RAPIDE  
KIT NEGATIVO RAPIDO  
SZYBKI ZESTAW NEGATYWOWY**

Instruction for use · Gebrauchsanweisung · Mode d'emploi  
Instruccion de empleo · Istruzioni per l'uso  
Gebruiksaanwijzing · Brugsanvisning · Bruksanvisning  
Bruksanvisning · Instrukcja użycia

## PRODUCT DESCRIPTION

The TETENAL COLORTEC® range offers you a high level of performance, quality, safety, convenience, environmental friendliness and service. COLORTEC® – the best available technology for colour chemicals. COLORTEC® C-41 RAPID NEGATIVE KIT has been specially designed for optimal development of each type of C-41 compatible colour negative film using rotary processing at 100 °F/113 °F (38 °C/45 °C).

Thanks to TETENAL'S Fast-BX technology, bleach-fixing can be over in as little as 4 minutes. And with equal part quantities, mixing is simple. Processing can be done as standard or rapid development.

COLORTEC® C-41 RAPID NEGATIVE KIT for maximum efficiency and quality.

### PACKAGING

COLORTEC® C-41

### RAPID NEGATIVE KIT

Art. No.	for 1 litre	for 5 litres
	102226 ml conc.	102228 ml conc.
Colour Developer CD Part 1	100	500
Colour Developer CD Part 2	100	500
Colour Developer CD Part 3	100	500
Bleach Fix BX Part 1	200	1000
Bleach Fix BX Part 2	200	1000
Stabiliser STAB	100	50*

\* "STAB" formulas for 1 litre and 5 litres are different !

### YIELD

Working solution	135-36	CN films film rolls 120	APS IX-240-40
	12 (≥ ISO 400/27°)	12	18 (≥ ISO 400/27°)
1 litre	16 (≤ ISO 200/21°)	16	24 (≤ ISO 200/21°)
5 litres	60 (≥ ISO 400/27°)	60	90 (≥ ISO 400/27°)
	80 (≤ ISO 200/21°)	80	120 (≤ ISO 200/21°)

Maximum yield is achieved only by putting through at least 4 CN-films/ 6 APS-films at a time in at least 1,0 litre.

## APPLICATION

### MIXING

68-113 °F

	Water ml	Part 1 ml	Part 2 ml	Part 3 ml	Working Solution l
Colour Developer CD	700 3500 10500	100 500 1500	100 500 1500	100 500 1500	1,0 l 5,0 l 15,0 l
Bleach Fix BX	600 3000	200 1000	200 1000		1,0 l 5,0 l
Stabiliser STAB	900 4950	100 50			1,0 l 5,0 l

Part preparation possible.

### Notes on mixing:

If the storage temperature is too low, crystals may form in part 2 of the bleach fix. These can be dissolved by warming the bottle.

### PROCESSING

Rotary development: Standard development at 38 °C/100 °F

Step	Tempe- rature °F	Processing time			
		1-4 Films	5-8 Films	9-12 Films	13-16 Films
0 Pre-heat the developer drum	100 ± 0,5			5' 00"	
1 Colour Developer	100 ± 1,0	3' 15"	3' 30"	3' 45"	4' 00"
2 Bleach Fix	100 ± 3,0	4' 00"	6' 00"	10' 00"	15' 00"
3 Rinse	86-104			3' 00"	
4 Stabiliser	68-104			1' 00"	

### Notes on processing steps:

Rinses with flowing water, change water every 30 seconds or rinse for longer periods.



### Alternative development at 86 °F

Processing should be done at 86 °F if standard development at 100 °F produces uneven results.

Step	Temperature °F	Processing time			
		1-4 Films	5-8 Films 1-16 Films	9-12 Films	13-16 Films
0 Pre-heat the developer drum	86 ± 0,5			5' 00"	
1 Colour Developer	86 ± 1,0	8' 00"	9' 00"	10' 00"	11' 00"
2 Bleach Fix	86 ± 3,0	6' 00"	8' 00"	12' 00"	20' 00"
3 Rinse	86-104		6' 00"		
4 Stabiliser	68-104		1' 00"		

#### Notes on processing steps:

- Rinses with flowing water, change water every 30 seconds or rinse for longer periods.

### Rapid-development at 113 °F (One-shot development)

Step	Temperature °F	Processing time
0 Pre-heat the developer drum	113	2' 00"
1 Colour Developer	113	2' 00"
2 Bleach Fix	113	3' 30"
3 Rinse	113	4 x 15"
4 Stabiliser/ wetting agent	68-104	0' 30"
5 Fast drying with Tetenal DRYSONAL	68-77	0' 45"

#### Notes on processing steps:

- Depending on the processor used, the rotation speed and the type of film, the time for the colour developer is to be lengthened in the case of under-development (+ 10 s) and shortened in the case of over-development (- 10 s).
- The stabilising process may also be carried out days later.

### Push-development at 100 °F

Colour processing time for each screen step is to be extended by 30 seconds at 100 °F.

## GENERAL INSTRUCTIONS

### PROCESSING

- Stop bath (TETENAL Indicet 1+19 or 3% acetic acid: 20 s) increases processing reliability when the bleach fix bath is re-used several times.
- If the user processes predominantly high-speed films (ISO 400/27° and faster), it is recommended that only three development runs (per litre of colour developer) be done. If development is uneven (sheet films), it is recommended that the rotation speed be increased and/or the film be pre-washed for two minutes at process temperature.
- It is important to set the drying temperature so that the film emerges flat from the drying cabinet. If the emulsion side is buckled, then the drying temperature is too high. If the reverse side is buckled, then the temperature is too low. The drying temperature needs to be adjusted to take account of prevailing conditions, with due regard to relative humidity (seasonal variations).
- The times given in the tables include times of approx. 10 sec for pouring out the bath concerned. The times given for bleach fixing and final rinsing are minimum times and may be exceeded by up to 50%.

### DEVIATIONS IN RESULTS

Results	Possible causes	Measure
Insufficient colour density	Under-exposure of film	Check camera
Insufficient colour density and insufficient contrast, minimum density (mask) too bright	Under-development  Development time too short and/or temperature too low	Increase colour development time (by 15-30 s). Keep to processing conditions
Colour of mask brownish	Bleach-fixing time too short  Application too thin	Bleach-fix film again and rinse  Correct application, bleach-fix film again
Milky streaks and surfaces after drying	Insufficient bleaching, insufficient moistening of film	Follow-up treatment in bleach-fixer necessary
Whitish spots on dry film	Calcium spots, application water too hard	Apply stabiliser in future using 1/3 tap water + 2/3 demineralised (boiled) water. Bath films again in this solution
Colour of mask untypical, minimum density too high but maximum density too low	Colour developer polluted by bleach-fixer	Fresh application of colour developer

**DURABILITY**

	Used solution	Opened concentration
Colour Developer CD	6 weeks	12 weeks
Bleach Fix BX	24 weeks	24 weeks
Stabiliser STAB	24 weeks	24 weeks

After partial removal protect concentrates in totally sealed original bottles using Protectan. Keep working solutions in completely full and well sealed glass or plastic bottles.

**SERVICE**

Technischer Service

TETENAL AG & CO. KG

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**SAFETY NOTES**

The usual safety measures regarding care in the handling of chemicals should be observed when using these products. Use a protective barrier cream before commencing work. Wash your hands thoroughly after work, and apply a skin-care cream. Always use adequate means of protection (safety goggles, gloves, overalls), and ensure sufficient ventilation in the workplace at all times. Avoid contact with skin and eyes. Do not ingest chemicals. Keep these products out of reach of children and store away from foodstuffs at all times. Label all storage containers in a clear, permanent and unambiguous manner.

**First aid measures in the event of:**

Skin contact: Wash with ample water and soap; consult a doctor if necessary. Eye contact: Rinse for 15 minutes with water; consult an eye specialist. Swallowing: Keep packaging and consult a doctor immediately.

Further details can be obtained from the safety data sheets or from the indications on the packaging.

**DISPOSAL**

Rinse out concentrate residues with some of the water used for the solution and add to the solution in question. Return the containers for recycling without concentrate residues. For further information on waste management techniques for photographic chemicals please contact the local environmental authorities.

**COLORTEC CHEMICALS****COLORTEC® C-41**

102226	RAPID NEGATIVE KIT	for	1 l	working solution
102228	RAPID NEGATIVE KIT	for	5 l	working solution

**COLORTEC® RA-4**

102124	PROFESSIONAL PRINT KIT RT	for	5 l	working solution
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**COLORTEC® E-6**

102031	E-6 3-BATH KIT	for	1 l	working solution
102034	E-6 3-BATH KIT	for	5 l	working solution