



simple
solutions

Kodak Chemicals

Flexicolor
C-41B Chemicals



Kodak Flexicolor C-41B chemicals

features

benefits

WHAT IS C-41B?

- *C-41B is the original film cycle designed for C-41B minilab equipment. It has a longer bleach and fix time, giving an overall longer process time. It can be configured to have either a final rinse or a water wash followed by a final rinse.*
- *The kits are supplied as easy to mix liquids designed to be simple to use.*
- *All Kodak's range of minilab chemicals are color coded on the cases, bottle labels and caps. This makes the chemicals easy to recognize and minimizes expensive mixing errors.*
- *The minilab chemicals are packed in specially designed bottles, which have excellent pouring and emptying characteristics, minimizing splashing and chemical concentrate to be rinsed out of the bottle.*

THE COMPLETE C-41B RANGE

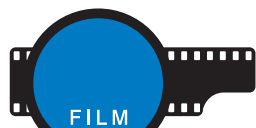
KODAK FLEXICOLOR
Developer Replenisher LORR

KODAK FLEXICOLOR
Bleach III NR Replenisher

KODAK FLEXICOLOR
Fixer and Replenisher

KODAK FLEXICOLOR
Final Rinse and Replenisher*

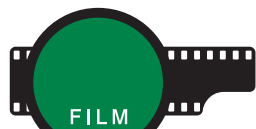
** This process stage can be configured with a water wash followed by a final rinse.*



DEVELOPER



BLEACH III



FIXER



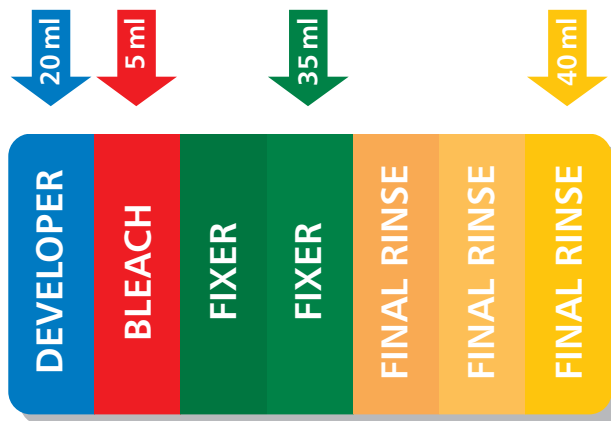
FINAL RINSE

THE C-41B KIT SIZES

Designed for your convenience

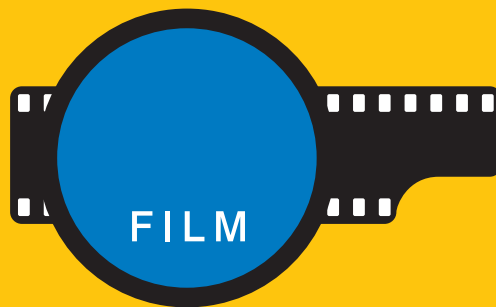
- Developer Replenisher LORR, to make 4 x 10L of replenisher. Catalog number: 812-1857
- Bleach III NR replenisher, a ready to use solution to make 2 x 5L of replenisher. Catalog number: 133-2634
- Fixer and Replenisher, to make 4 x 5 Gallon of replenisher. Catalog number: 169-3837
- Final Rinse and Replenisher, to make 12 x 10L of replenisher. Catalog number: 813-6368

REPLENISHMENT RATES (ml/135 x 24 exp roll)



the **C-41B**

range





Kodak Flexicolor C-41B chemicals

ENVIRONMENT

Kodak products are designed to minimize the impact to the environment. The solutions are designed to be used at the lowest replenishment rates to achieve optimum quality of the processed film and the packaging is formatted to give maximum product protection, while minimizing the plastic and cardboard used. Our commitment to the environment also includes our manufacturing sites which are registered to ISO 14001.

Investment *in quality*

Kodak invests many millions of dollars each year on research and development programs to improve the final print quality, of which the film process is an integral part. By using Kodak chemicals you can be assured of optimum film processing quality for all film types.

The Kodak investment in quality also covers its manufacturing operations worldwide. Not only are all of the raw material we use in making the photochemicals specified to a high standard, our manufacturing process is also certified to the internationally accepted ISO 9002 standard to assure consistent batch to batch quality.



***For more information visit the Kodak website at:
www.kodak.com/go/photochemicals***

Because of our constant endeavor to improve quality and design, modifications may be made to products from time to time.
Details of stock availability and specifications given in this publication are subject to change without notice.

Introduction

Les produits chimiques KODAK FLEXICOLOR, traitement C-41, sont destinés au traitement des films négatifs couleur Kodak tels que les films KODAK PROFESSIONAL PORTRA et ceux d'autres fabricants. Ils sont fournis sous forme de concentré liquide pour faciliter le mélange et sont conçus pour donner des résultats optimum avec tous les types de développeuses.

Développeuses de mini-laboratoire

- Le cycle des films **C-41B** est plus court que le cycle de traitement C-41 standard. Ce cycle élimine les deux lavages et utilise un temps de fixation plus court.
- Le cycle de traitement des films **C-41RA** est le plus court des cycles de traitement C-41. Il s'agit du cycle le plus fréquemment utilisé dans les mini-laboratoires. Dans ce cycle, utilisez le régénérateur de blanchiment NR KODAK FLEXICOLOR RA et le fixateur et régénérateur FLEXICOLOR RA. Il nécessite un équipement spécial, avec agitation plus forte. Il est conçu comme un cycle sans lavage.

Kodak propose un large choix de conditionnements, pour produire de 3,8 litres à 283,5 litres de traitement C-41B et C-41RA. Pour des formats et des références spécifiques, consultez votre catalogue KODAK ou contactez votre distributeur habituel de produits KODAK.

Produits chimiques KODAK SM en mini-laboratoire SM

Système faible volume exclusif pour régénération directe des produits chimiques pour films sans mélange. Les produits SM reflètent la simplicité caractéristique du système. (L'utilisation des produits chimiques SM est réservée aux mini-laboratoires SM.)

Avantages de ces produits :

- Réduction de la variabilité des traitements de faible volume
- Pas de mélange de produits chimiques, chargement sans risque de salissure
- Temps d'accès du premier tirage 25% plus rapide qu'avec le traitement RA-4*
- Réduction des effluents et de leurs coûts d'élimination

* Les comparaisons supposent un équipement de mini-laboratoire utilisé régulièrement et des produits chimiques classiques, tels que KODAK EKTACOLOR PRIME pour traitement RA-4 et KODAK FLEXICOLOR pour traitement C-41.

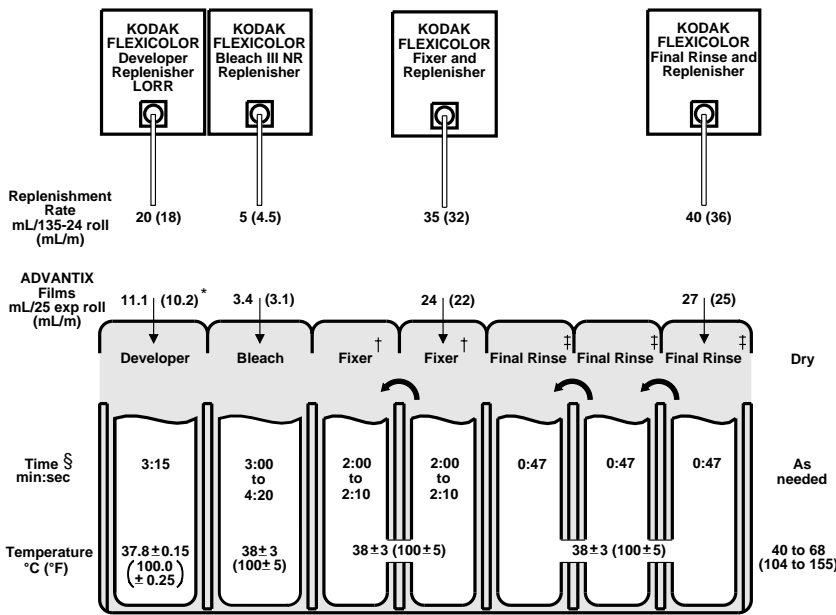
Produits chimiques KODAK FLEXICOLOR SM

Traitement C-41SM, pour développement des films Kodak, par exemple Bright Sun, ADVANTiX, ROYAL GOLD et MAX, ainsi que les films négatifs couleur d'autres fabricants.

Kodak propose un large choix de conditionnements, pour produire de 1,5 litre à 3,8 litres de traitement C-41SM. Pour des formats et des références spécifiques, consultez votre catalogue KODAK ou contactez votre distributeur habituel de produits KODAK.

Process C-41B Cycle

The primary feature of this process is a shorter processing cycle. This cycle was made shorter by eliminating both washes and reducing the fixer time. Originally the process used a final wash, but the most common version in use today is the “washless” cycle.



* These rates are averages based on an estimated film-speed mix in 25-exposure rolls of KODAK ADVANTIX Films.

† Use two countercurrent-flow fixer tanks with equal time in each tank.

‡ If your minilab uses a final wash, also install a wash between the fixer and final rinse with a wash time of 1:40. Reduce the final rinse time to 40 seconds, and use a replenishment rate of 35 mL/135-24 roll (32 mL/m). Use a wash-flow rate of 1250 mL/135-25 roll (1080 mL/m) for a two-stage countercurrent wash or 2500 mL/135-24 roll (2160 mL/m) for a single-stage wash.

§ Immersion time plus crossover time to the next tank. Bleach, fixer, and final rinse times are minimums; longer times are acceptable.

Process C-41B

The primary feature of this cycle is that it is shorter than the standard Process C-41 cycle. It eliminates both washes and uses a shorter fixer time. Most minilabs that use Process C-41B use the washless version. However, if your minilab includes a final wash, see the fourth footnote below.

Table 4-3 Process C-41B Cycle

Solution/Step	Time* min:sec	Temperature °C (°F)
FLEXICOLOR Developer Replenisher LORR	3:15	37.8 ± 0.15 (100.0 ± 0.25)
FLEXICOLOR Bleach III NR Replenisher	3:00 to 4:20	38 ± 3 (100 ± 5)
FLEXICOLOR Fixer and Replenisher†	4:00 to 4:20	38 ± 3 (100 ± 5)
FLEXICOLOR Final Rinse and Replenisher‡§	2:20	38 ± 3 (100 ± 5)
Dry	As needed	40 to 68 (104 to 155)

* Immersion time plus crossover time to the next tank. Bleach, fixer, and final rinse times are minimums; longer times are acceptable.

† Use two countercurrent-flow fixer tanks with equal times in both tanks (2:00 to 2:10 in each tank).

‡ Use three countercurrent-flow final rinse tanks with equal times in all tanks (0:47 in each tank).

§ If your minilab uses a final wash, also install a wash between the fixer and final rinse with a wash time of 1:40. Reduce the final rinse time to 40 seconds, and use a replenishment rate of 35 mL/135-24 roll (32 mL/m). Use a wash-flow rate of 1250 mL/135-25 roll (1080 mL/m) for a two-stage countercurrent wash or 2500 mL/135-24 roll (2160 mL/m) for a single-stage wash.

Table 4-4 Starting-Point Replenishment Rates—Process C-41B

Solution	Starting-Point Replenishment Rate	
	mL/135-24 Roll (mL/m)	mL/25-Exp ADVANTIX Film (mL/m)*
FLEXICOLOR Developer Replenisher LORR	20 (18)	11.1 (10.2)
FLEXICOLOR Bleach III NR Replenisher	5 (4.5)	3.4 (3.1)
FLEXICOLOR Fixer and Replenisher	35 (32)	24 (22)
FLEXICOLOR Final Rinse and Replenisher	40 (36)	27 (25)

* These rates are averages based on an estimated film-speed mix in 25-exposure rolls of KODAK ADVANTIX Films.