

PRODUCT INFORMATION

UNI FIX C-41 Fixer and Replenisher *FX-R*

UNI FIX C-41 is a universal Fixer concentrate, designed for Minilab processes C-41 RA and CN-16 L, as well as for Dip & Dunk machines and Continuous Machines (CF) working with process C-41 PRO.

UNI FIX C-41 2 x 3 L conc. REF 13351

C-41 RA: for 2 x 10 L

CN-16 L: for 2 x 4 L N3-R (FP 362 B, FP 562 B, FP 922)

CN-16 L: for 4 x 4 L N3-R (FP 232 B)

C-41 PRO: for 2 x 20 L

Depending on process and application, UNI FIX concentrate is diluted with water in different proportions for the preparation of Fixer replenisher, resp. Fixer working solution.

PROCESS C-41 RA

C-41 RA is a rapid process for developing of C-41 Colour Negative films in Minilab film processors, e.g. such as Noritsu V-30, Agfa FP 1-72, KIS FP 32. RA stands for Rapid Access.

MIXING OF REPLENISHER

C-41 RA

Water

UNI FIX
conc.

Replenisher FX-R
C-41 RA



+



=



Warm water favours quick and good mixing. Stir/mix for approx. 30 s.

700 ml
7 L

300 ml
3 L

1 L
10 L

REPLENISHMENT RATES

C-41 RA

33 ml/135-24

60 ml/film 120

30 ml/ meter film

68 ml/meter film 120

TIME & TEMPERATURE

C-41 RA

Temperature: 38°C ± 3°

Time: 2 x 45 s

MIXING OF WORKING SOLUTION

C-41 RA

Mixing of working solution is required when the working tanks of the processor are to be refilled, e.g. when installing a machine or after tank cleaning as part of maintenance.

Working solution = Replenisher

EVAPORATION COMPENSATION

C-41 RA

Temperature-controlled working solutions are subject to continuous evaporation of water. Accordingly, the evaporative loss should be compensated for by adding water daily to prevent an increase in concentration. If the machines are not equipped with an automatic compensation system, water should be added manually. To do this, top up the fixer working tanks with water to the overflow level before starting work each day.

PROCESS CN-16 L

CN-16 L is a rapid process for the developing of **C-41 Colour Negative** films in Fuji Minilab film processors, such as **FP 232 B**, **FP 362 B**, **FP 562 B** and **FP 922**.

The tank configuration of the **FP 362 B**, **FP 562 B** and **FP 922** processors is identical, but differs from the **FP 232 B** processor in terms of the Fixer, Super Rinse and Stabilizer.

Version for FP 232 B: 1 Fixer tank—2 Super Rinse tanks in cascade—1 Stabilizer tank.

Version for FP 362 B, FP 562 B, FP 922: 2 Fixer tanks in cascade—1 Super Rinse Tank—2 Stabilizer tanks in cascade.

Another difference relates to the Fixer replenisher: in the **FP 362 B**, **FP 562 B** and **FP 922** processors the mixing ratio of water and concentrate is different to the ratio applied with the **FP 232 B** processor.

The following describes the application of the Fixer in CN-16 L process, using Uni Fix C-41.

MIXING OF REPLENISHER

N3-R

Water	UNI FIX conc.	Replenisher N3-R		
			=	
1.0 L	3.0 L	4.0 L	(FP 362 B, FP 562 B, FP 922)	Warm water favours quick and good mixing. Stir/mix for approx. 30 s.
2.5 L	1.5 L	4.0 L	(FP 232 B)	

REPLENISHMENT RATES N3-R

FP 232 B: 33 ml/135-24 resp. 63 ml/120

FP 562 B: 8 ml/135-24 resp. 17 ml/120

FP 362 B: 8 ml/135-24 resp. 17 ml/120

FP 922: 8 ml/135-24 resp. 17 ml/120

TIME · TEMPERATURE

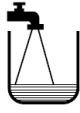
N3 / N3-1 & N3-2

Temperature: 38°C ± 3 °C

Time: 2 x 50 s (FP 362 B, FP 562 B, FP 922) / 3:12 min. (FP 232 B)

MIXING OF WORKING SOLUTION

N3 / N3-1 & N3-2

Water	UNI FIX conc.	Working solution	
			=
5.60 L	3.00 L	8.6 L	FP 232 B: 1 x Tank N3
3.25 L	1.75 L	5.0 L	FP 362 B: 1 x Tank N3-1 and 1 x Tank N3-2
3.25 L	1.75 L	5.0 L	FP 562 B: 1 x Tank N3-1 and 1 x Tank N3-2
5.00 L	2.70 L	7.7 L	FP 922 1 x Tank N3-1 and 1 x Tank N3-2

Warm water favours quick and good mixing. Stir/mix for approx. 30 s.

EVAPORATION COMPENSATION

N3 / N3-1 & N3-2

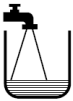
Temperature-controlled working solutions are subject to continuous evaporation of water. Accordingly, the evaporative loss should be compensated for by adding water daily to prevent an increase in concentration. If the machines are not equipped with an automatic compensation system, water should be added manually. To do this, top up the fixer working tanks with water to the overflow level before starting work each day.

PROCESS C-41 PRO

C-41 PRO is the standard process for the development of C-41 compatible Colour Negative films in Dip & Dunk machines, Continous machines (CF) and Rollertransport machines. The films are passing through 4 tanks with Colour Developer, Bleach, Fixer, Stabilizer and a Water wash between Bleach and Fixer as well as a Final water wash between Fixer and Stabilizer.

MIXING OF REPLENISHER

C-41 PRO

Water	UNI FIX conc.	Replenisher FX-R C-41 PRO
		
850 ml	150 ml	1 L
8,5 L	1,5 L	10 L
17 L	3 L	20 L

Warm water favours quick and good mixing. Stir/mix for approx. 30 s.

REPLENISHMENT RATES

C-41 PRO

Dip & Dunk Machines:	66 ml/135-36 resp. 66 ml /120
Roller transport machines:	900 ml/m ²
Continous machines (CF):	30 ml/meter film 135 resp. 62 ml/meter film 120

TIME

C-41 PRO

4 min - 4 min 20 s

TEMPERATURE

C-41 PRO

38°C ± 3 °C

MIXING OF WORKING SOLUTION

C-41 PRO

Mixing of working solution is required, when the working tank of the machine is to be refilled, e.g. when installing a machine or after tank cleaning as part of maintenance.

Working solution = Replenisher

EVAPORATION COMPENSATION

C-41 PRO

Temperature-controlled working solutions are subject to continuous evaporation of water. Accordingly, the evaporative loss should be compensated for by adding water daily to prevent an increase in concentration. If the machines are not equipped with an automatic compensation system, water should be added manually. To do this, top up the fixer working tanks with water to the overflow level before starting work each day.

OCCUPATIONAL SAFETY

Handling of photographic chemicals is safe, if used properly and protective measures are followed. Hazard and precautionary information can be found on the label (H and P phrases, hazard symbol) and in the safety data sheet. Personal protective equipment should include safety goggles or face shield, protective gloves and a lab coat or apron.

STORAGE

Uni Fix concentrate should be stored dry, frost-proof and out of the reach of children. The maximum temperature range is between 5°C and 25°C. Storage temperatures between 10°C and 20°C are ideal.

SHELF LIFE

UNI Fix concentrate in its original packaging in unopened bottles has a shelf life of approx. 2 years.

DISPOSAL

Photographic chemicals - concentrates or used baths - must not be discharged into the public sewerage system. These chemicals must be discarded by commercial waste treatment companies, who properly treat and dispose of in accordance with legal regulations. Further information can be found in the safety data sheet.

ADDITIONAL INFORMATION

For further information on the use of Calbe chemicals, please refer to the **Mixing instructions**, which are included in printed form with every pack and can also be downloaded from the Calbe website.

In addition to the Mixing instructions, there are **Product Information** and **Safety Data Sheets** available for the individual items, to be downloaded from the Calbe website.

Process Information for C-41 RA, C-41 PRO and CN-16 L, including comprehensive descriptions of the respective procedures, is also available on the Calbe website. www.calbe-chemie.de