

### EnviroPrint FP Chemicals for Fast Processing

#### Description

FUJIFILM Europe's Fast Processing (FP) chemistry for short processing time minilabs is available in medium replenishment rate for the developer and in standard and medium replenishment rate for the bleach-fix. These products are all air controlled (AC) and have been extensively tested in a wide range of minilabs running with various short process conditions. The Monopart developer, bleach-fix and stabilizer reduce the risk of mixing errors, package waste and minimise the required storage space.

All products give excellent process stability and can be installed in processes having a development time as short as 20 seconds. Replenishment rates have been optimised to reduce waste generation and to get the best results out of high-speed minilabs.

#### Process parameters

Medium replenishment rate: Developer and Bleach-Fix

	Time	Temperature (°C)	Replenishment Rate ml/m <sup>2</sup>
EnviroPrint FP Developer Replenisher MR	33"	39 ± 0.3	70 - 80
	27"	39.5 ± 0.3	75 - 90
	20-22"	40 ± 0.3	80 - 100
EnviroPrint FP Bleach-Fix Replenisher MR	33"	36 – 40	70 - 90
	27"	36 – 40	75 - 100
	20"	36 – 40	75 - 100
EnviroPrint FP Super Stabilizer	50 - 90"	34 - 40	200 - 400

Medium replenishment rate: Developer / Standard replenishment rate: Bleach-Fix

	Time	Temperature (°C)	Replenishment Rate ml/m <sup>2</sup>
EnviroPrint FP Developer Replenisher MR	33"	39 ± 0.3	70 – 80
	27"	39.5 ± 0.3	75 - 90
	20-22"	40 ± 0.3	80 – 100
EnviroPrint FP Bleach-Fix Replenisher HR	33"	36 – 40	160
	27"	36 – 40	180–
	20"	36 – 40	200
EnviroPrint FP Super Stabilizer	50 - 90"	34 - 40	200 - 400

The wide variety of "fast" processing equipment as well as the different paper brands on the market makes it difficult to standardise the process parameters. The table above shows recommended replenishment rates and processing temperatures. As with other chemistries, differences between paper brands and processing equipment may mean that you need to fine-tune your process. For more information please contact your FUJIFILM representative or consult the FUJIFILM Europe Minilab Chemical Guide.

## **Mixing instructions**

### **Developer**

Medium replenishment rate

EnviroPrint FP Dev. Replenisher MR	Water	EnviroPrint FP Dev. MR concentrate	Replenisher	RA4 Quick Starter	To make
Replenisher	800 ml	200 ml	/	/	1000 ml
Tank from concentrate					
33 sec, 39.0°C	840 ml	100 ml	/	60 ml	1000 ml
27 sec, 39.5°C	850 ml	100 ml	/	50 ml	
20-22 sec, 40.0°C	860 ml	100 ml	/	40 ml	
Tank from Replenisher					
33 sec, 39.0°C	440 ml	/	500 ml	60 ml	1000 ml
27 sec, 39.5°C	450 ml	/	500 ml	50 ml	
20-22 sec, 40.0°C	460 ml	/	500 ml	40 ml	

### **Bleach-Fix**

There are two options for preparing a fresh tank. You are advised to use **EnviroPrint Bleach-Fix MP Starter AC** (dedicated starter for the monopart bleach-fix) in combination with **EnviroPrint FP Bleach-Fix MR** or **EnviroPrint FP Bleach-Fix HR**. Alternatively, if you do not wish to use this dedicated starter, you must recirculate the bleach-fix overnight (after retanking) to re-activate the bleach-fix, as lower bleach-fix activity is a typical problem affecting monopart bleach-fixes stored for a period of time.

Medium replenishment rate

<b>EnviroPrint FP Bleach-Fix MR</b>	Water	<b>EnviroPrint FP Bleach- Fix MR concentrate</b>	<b>EnviroPrint Bleach-Fix MP Starter AC</b>	To make
Replenisher	500 ml	500 ml	/	1000 ml
Tank, Option 1	705 ml	275 ml	20 ml	1000 ml
Tank, Option 2 †	670 ml	330 ml	/	1000 ml

### Standard replenishment rate

<b>EnviroPrint FP Bleach-Fix HR</b>	Water	<b>EnviroPrint FP Bleach-Fix HR concentrate</b>	<b>EnviroPrint Bleach-Fix MP Starter AC</b>	To make
Replenisher	650 ml	350 ml	/	1000 ml
Tank, Option 1	705 ml	275 ml	20 ml	1000 ml
Tank, Option 2 †	670 ml	330 ml	/	1000 ml

† Option 2 requires 8-12 hours chemistry recirculation in the processor (for example, overnight) before the bleach-fix is ready for use.

## Super Stabiliser

### Standard and medium replenishment rate

<b>EnviroPrint FP Super Stabilizer &amp; Repl</b>	Water	<b>EnviroPrint FP Super Stabilizer concentrate</b>	To make
Tank & Replenisher	992 ml	8 ml	1000 ml

## pH and Density specifications

### Medium replenishment rate:

	Fresh					
	pH (25°C)			Density (20°C) g/cm <sup>3</sup>		
	Tank	Repl		Tank	Repl	
EnviroPrint FP Dev MR						
33 sec, 39.0°C	10.10	12.40	± 0.05	1.029	1.037	± 0.003
27 sec, 39.5°C	10.25	12.40	± 0.05	1.028	1.037	± 0.003
20-22 sec, 40.0°C	10.35	12.40	± 0.05	1.027	1.037	± 0.003
EnviroPrint FP Bleach-Fix MR						
Option 1	6.00	5.70	± 0.30	1.077	1.135	± 0.005
Option 2	5.80	5.70	± 0.30	1.090	1.135	± 0.005
EnviroPrint FP Super Stabilizer	No specification			0.998 - 1.002		

### Standard replenishment rate:

	Fresh					
	pH (25°C)			Density (20°C) g/cm <sup>3</sup>		
	Tank	Repl		Tank	Repl	
EnviroPrint FP Dev MR 33 sec, 39.0°C 27 sec, 39.5°C 20-22 sec, 40.0°C	10.10	12.40	± 0.05	1.029	1.037	± 0.003
	10.25	12.40	± 0.05	1.028	1.037	± 0.003
	10.45	12.40	± 0.05	1.027	1.037	± 0.003
EnviroPrint FP Bleach-Fix HR Option 1 Option 2	6.00	5.80	± 0.30	1.077	1.095	± 0.005
	5.80	5.80	± 0.30	1.090	1.095	± 0.005
EnviroPrint FP Super Stabilizer	No specification			0.998 - 1.002		

### Storage and usage

Concentrates must not be stored below 5°C and above 30°C for a long period of time.

It is a typical characteristic of mono-part developer concentrates filled in “classic” drums (not cubitainer) to have, once opened, a lower latitude on chemical stability of the concentrate than 2 or 3 part developers.

When a pack of concentrate is used at once to prepare working strength solution there is no problem. When packs (drums) are split or connected to automatic mixing devices it is important to prevent too much air entering the drum and to consume the content of the drum within < 8 working days regardless the size of the recipient (you can drill a hole in the cap which fits nicely around the suction tube).

Be also aware that the volume of replenisher solution prepared should not exceed 2 weeks expected consumption.

### Chemical Warning

All photographic processing solutions can exert harmful effects when brought into contact with human tissue to a greater or lesser extent, depending on the nature of the solution and its concentration. All users of such solutions should exercise the greatest care to avoid the chemicals contacting the skin, eyes or other parts of the body.

Always wear solution resistant gloves and effective eye protection. In case of accidental contact with processing solutions wash the affected part with plenty of clean cold running water. Consult a medical doctor. Some photographic solutions produce irritating vapours therefore thorough ventilation is essential.

Do not inhale air above processing solutions.

Always read the MSDS and the hazard information on the packs of solution concentrate before attempting to handle the solutions.

The MSDS (Material Safety Data Sheets) are available on request if you do not have a copy.