

# Using KODAK EKTACOLOR PRIME LORR and KODAK FLEXICOLOR LU & C-41RA Chemicals as Starting Fresh Tank Chemicals in SM Minilabs

## Kodak

TECHNICAL DATA / CURRENT INFORMATION SUMMARY

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This publication describes the use of KODAK EKTACOLOR PRIME LORR and C-41RA Chemicals to make fresh tank chemicals in RA-2SM and C-41SM Minilabs.

Other photo chemical manuals and publications are available on the Kodak website at [www.kodak.com/go/photochemicals](http://www.kodak.com/go/photochemicals); select the links for "Technical Resources" and "Processing Manuals." Current Information Summaries are available from "Technical Resources."

### RECOMMENDED KODAK CHEMICALS

Use KODAK EKTACOLOR PRIME LORR Chemicals to make fresh tank solutions for RA-2SM minilabs, and KODAK FLEXICOLOR C-41RA Chemicals to make fresh tank solutions for C-41SM minilabs, using these instructions. These commonly-used chemicals offer convenient handling and onboard mixing in SM Minilabs.

For catalog item numbers in the specific Kodak regions, contact your local suppliers of Kodak products.

### MEASURING DEVICES NEEDED

You will need calibrated measuring devices for accurate deliver of solution volumes. A 5-litre pitcher is adequate. For the smaller containers we recommend graduated cylinders, 1 litre and especially 100 mL for C-41SM. These can be obtained at a local laboratory supply house or even a retail store.

#### For RA-2 SM:

- A 5-litre container for water
- Another 5-litre container for bleach-fix
- A one-litre container for concentrates and starters
- A funnel

#### For C-41SM:

- A graduated 5-litre container
- A 1-Litre graduated cylinder
- A 100-milliliter graduated cylinder
- A funnel

### PREPARING FRESH TANK SOLUTIONS FOR RA-2SM MINILABS

Follow these guidelines to prepare working tank solutions using KODAK EKTACOLOR PRIME LORR Chemicals. Observe all safe handling precautions on the chemical labels and in the MSDS for each product.

### RECOMMENDED KODAK CHEMICALS

Use KODAK EKTACOLOR PRIME LORR Chemicals to make tank solutions for RA-2SM Minilabs, using these instructions. KODAK EKTACOLOR PRIME LORR Chemicals all offer the advantages of a single-part concentrate for convenient handling and mixing.

The catalog numbers for the required chemicals are found in regional catalogs. Some differ from region to region; check with your local supplier of Kodak products.

You will need:

- KODAK EKTACOLOR PRIME SP Developer Replenisher LORR
- EKTACOLOR RA Developer Starter
- KODAK EKTACOLOR PRIME SP Bleach-Fix Replenisher LORR
- EKTACOLOR PRIME SP Bleach-Fix Starter

Fresh tank solutions should be made on board the processor through the recirculation filter fitting, using a pitcher, graduated cylinder(s) and a funnel.



### RA-2SM Developer Fresh Tank Solution

The table below shows the tank sizes vary depending on the minilab used. Mix sizes are called out for the most common RA-2SM minilabs.

Tank volumes are with racks in place. Always add approximately 90% of the required amount of water first, then the developer replenisher concentrate, then the starter. Top off with the remaining required amount of water.

#### Preparing Fresh RA-2SM Developer Tank Solution using KODAK EKTACOLOR PRIME SP Developer Replenisher LORR and EKTACOLOR RA Developer Starter

Minilab Model	Tank Volume (Litres)	Water (Litres)	EKTACOLOR PRIME SP Developer Replenisher LORR Concentrate (mL)	EKTACOLOR RA Developer Starter Concentrate (mL)
To make	1 litre	883 mL	87 mL	30 mL
MP1600SM	5.7	5.03	496	171
2102SM	6.5	5.74	566	195
2211SM	3.5	3.09	305	105
2301SM & 2302SM	5.7	5.03	496	171
2511SM	3.2	2.83	278	96
2611SM	4.1	3.62	357	123
2701SM	5.7	5.03	496	171
2711SM	5.7	5.03	496	171
2721SM	5.7	5.03	496	171
2802SM	5.9	5.21	513	177
2901SM	5.9	5.21	513	177
3001SM	4.1	3.62	357	123
3011SM	4.1	3.62	357	123
3101SM	7.5	6.62	653	225
3201SM & 3211SM	8.3	7.33	722	249
3202SM & 3212SM	8.3	7.33	722	249
3203SM & 3213SM	7.9	6.98	687	237
33xxSM	6.1	5.39	531	183

To ensure good processing performance, measure carefully in mixing the developer tank solution.

### RA-2SM Bleach-Fix Tank Solution

Use KODAK EKTACOLOR PRIME SP Bleach-Fix and Replenisher LORR and EKTACOLOR PRIME SP Bleach-Fix Starter per the table below.

The table below shows the tank sizes vary depending on the minilab used. Mix sizes are called out for the most common RA-2SM minilabs. Tank volumes shown are with racks in place.



#### Caution

Be very careful to avoid contamination of the developer with bleach-fix.

#### Preparing Fresh RA-2SM Bleach-Fix Tank Solution using KODAK EKTACOLOR PRIME SP Bleach-Fix Replenisher LORR and EKTACOLOR RA Bleach-Fix Starter

Minilab Model	Tank Volume (Litres)	Water (Litres)	EKTACOLOR PRIME SP Bleach-Fix Replenisher LORR Concentrate (mL)	EKTACOLOR PRIME SP Bleach-Fix Starter Concentrate (mL)
To make	1 litre	450 mL	500 mL	50 mL
MP1600SM	5.6	2.52	2.80	280
2102SM	6.3	2.84	3.15	315
2211SM	3.6	1.62	1.80	180
2301SM & 2302SM	5.6	2.52	2.80	280
2511SM	3.2	1.44	1.60	160
2611SM	4	1.80	2.00	200
2701SM	5.6	2.52	2.80	280
2711SM	5.6	2.52	2.80	280
2721SM	5.6	2.52	2.80	280
2802SM	6	2.70	3.00	300
2901SM	6	2.70	3.00	300
3001SM	4	1.80	2.00	200
3011SM	4	1.80	2.00	200
3101SM	7.4	3.33	3.70	370
3201SM & 3211SM	8.3	3.74	4.15	415
3202SM & 3212SM	8.3	3.74	4.15	415
3203SM & 3213SM	7.9	3.56	3.95	395
33xxSM	6.1	2.75	3.05	305

### Stabilizer Fresh Tank Solution

With the current KODAK EKTACOLOR Paper products, we have determined it is acceptable to start with Stabilizer Tanks containing fresh, clean water. By the time processed paper enters the last stabilizer tank (closest to the dryer), sufficient stabilizer is present to give an excellent finish to glossy paper. Long-term image quality is not sacrificed.

### Use KODAK Control Strips to Monitor the Process

After making fresh tank chemicals, use KODAK Control Strips, Process RA-4 to monitor process performance on startup. For instructions on processing control strips, see the maintenance manual for the specific SM Minilab.

For information on the use and diagnostic features of the control strips, see KODAK Publication No. Z-130, Using KODAK EKTACOLOR Chemicals, Section 7, "Process Monitoring and Troubleshooting with KODAK Control Strips, Process RA-4." Kodak publications are available from [www.kodak.com/go/photochemicals](http://www.kodak.com/go/photochemicals).

## PREPARING FRESH TANK SOLUTIONS FOR C-41SM MINILABS

Follow these instructions to prepare working tank solutions from of using KODAK FLEXICOLOR LORR and RA Chemicals. Observe all safe handling precautions on the chemical labels and in the MSDS for each product.

### RECOMMENDED KODAK CHEMICALS

Use KODAK FLEXICOLOR LORR and RA Chemicals to make tank solutions for C-41SM Minilabs, using the instructions in this publication. KODAK FLEXICOLOR Chemicals offer the advantages of a small size concentrates for convenient handling and mixing.

The catalog numbers for the required chemicals differ from region to region; check with your local supplier of Kodak products.

You will need:

- FLEXICOLOR LU Developer Replenisher LORR
- FLEXICOLOR Developer Starter LORR
- FLEXICOLOR RA Bleach Replenisher NR
- FLEXICOLOR Bleach Starter
- FLEXICOLOR RA Fixer and Replenisher
- FLEXICOLOR Final Rinse and Replenisher

Fresh tank solutions should be made on board the processor through the recirculation filter fitting, using graduated cylinders and a funnel.



### C-41SM Developer Fresh Tank Solution

Use KODAK FLEXICOLOR LU Developer Replenisher LORR.

Tank volumes in the tables below are with racks in place. Always add approximately 90% of the required amount of water first, then the developer replenisher concentrate, then the starter. Top off with the remaining required amount of water.

#### Preparing Fresh C-41SM Developer Tank Solution using KODAK FLEXICOLOR LU Developer Replenisher LORR and FLEXICOLOR Developer Starter LORR — for USA, Canada, and Latin America —

Minilab Model	Tank Volume (Litres)	Water (Litres)	FLEXICOLOR LU Developer Replenisher LORR Concentrate (mL)			FLEXICOLOR Developer Starter LORR Concentrate (mL)
			Part A	Part B	Part C	
To make	1 litre	883 mL	61 mL	17 mL	8.5 mL	30 mL
2511SM	2.2	1.94	134	37	19	66
QSF T155SM	2.9	2.64	177	49	25	87
QSF V100SM	11.2	10.18	683	190	95	336
QSF V30SM	4.1	3.73	250	70	35	123
QSF V50SM	6.3	5.73	384	107	54	189

#### Preparing Fresh C-41SM Developer Tank Solution using KODAK FLEXICOLOR LU Developer Replenisher LORR and FLEXICOLOR Developer Starter LORR — for Asia-Pacific, Europe, and Asia —

Minilab Model	Tank Volume (Litres)	Water (Litres)	FLEXICOLOR LU Developer Replenisher LORR Concentrate (mL)			FLEXICOLOR Developer Starter LORR Concentrate (mL)
			Part A	Part B	Part C	
To make	1 litre	883 mL	61 mL	33 mL	18 mL	30 mL
2511SM	2.2	1.89	134	72	39	66
QSF T155SM	2.9	2.49	177	94	51	87
QSF V100SM	11.2	9.62	683	364	196	336
QSF V30SM	4.1	3.52	250	133	72	123
QSF V50SM	6.3	5.41	384	205	110	189

To ensure good processing performance, measure carefully when mixing the developer tank solution.

# Using KODAK EKTACOLOR PRIME LORR and KODAK FLEXICOLOR LU & C-41RA Chemicals as Starting Fresh Tank Chemicals in SM Minilabs

## C-41SM Bleach Fresh Tank Solution

Use KODAK FLEXICOLOR RA Bleach Replenisher NR / C-41RA per the following directions.

### Preparing Fresh C-41SM Bleach Tank Solution using KODAK FLEXICOLOR RA Bleach Replenisher NR and FLEXICOLOR Bleach Starter

Minilab Model	Tank Volume (Litres)	Water (Litres)	FLEXICOLOR RA Bleach Replenisher NR Concentrate (mL)	FLEXICOLOR Bleach Starter Concentrate (mL)
To make	1 litre	-	880 mL	120 mL
2511SM	1.2	-	1.06	144
QSF T155SM	1.6	-	1.41	192
QSF V100SM	3.9	-	3.43	468
QSF V30SM	2.2	-	1.94	264
QSF V50SM	2.7	-	2.38	324



### Caution

Be very careful to avoid contamination of the developer with bleach-fix.

## C-41SM Fixer Fresh Tank Solution

Use KODAK FLEXICOLOR RA Fixer and Replenisher / C-41RA.

### Preparing Fresh C-41SM Fixer Tank Solution using KODAK FLEXICOLOR RA Fixer and Replenisher

Minilab Model	Tank Volume (Litres)	Water (Litres)	FLEXICOLOR RA Fixer and Replenisher (mL)
To make	1 litre	500mL	500 mL
2511SM	1.9	0.95	0.95
QSF T155SM	2.8	1.40	1.40
QSF V100SM	7.3	3.65	3.65
QSF V30SM	3.5	1.75	1.75
QSF V50SM	4.6	2.30	2.30

## C-41SM Final Rinse Fresh Tank Solution

Use KODAK FLEXICOLOR Final Rinse and Replenisher / C-41.

### Preparing Fresh C-41SM Rinse Tank Solution using KODAK FLEXICOLOR Final Rinse and Replenisher

Minilab Model	Tank Volume (Litres)	Water (Litres)	FLEXICOLOR Final Rinse and Replenisher Concentrate (mL)
To make	1 litre	955 mL	45 mL
2511SM	2.6	2.48	117
QSF T155SM	3.6	3.44	162
QSF V100SM	7.8	7.45	351
QSF V30SM	4.3	4.11	194
QSF V50SM	5.3	5.06	239

When tank solutions are mixed and verified that all of the tanks are filled with solution, turn on the recirculation and heater system and bring the solutions up to operating temperature.

### Use KODAK Control Strips to Monitor the Process

After fresh tank solutions are made and the processor is up to temperature, use KODAK Control Strips, Process C-41 to monitor process performance. For instructions on processing control strips, see the maintenance manual for the specific SM Minilab.

For information on the use and diagnostic features of the control strips, see KODAK Publication No. Z-131, Using KODAK FLEXICOLOR Chemicals, Section 5, "Process Monitoring and Troubleshooting." Kodak publications are available from [www.kodak.com/go/photochemicals](http://www.kodak.com/go/photochemicals).

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