Using KODAK EKTACOLOR PRIME LORR Minilab Chemicals

The processing chemicals that you use in a particular minilab system depend on the type of processor the system incorporates and its process cycle. This publication describes the use of KODAK EKTACOLOR PRIME LORR chemicals for processing KODAK EKTACOLOR EDGE and ROYAL Papers in minilabs with the standard RA minilab cycle. This range of single part chemicals provides consistent high quality results combined with convenient solution mixing. They also provide reduced replenishment rates that minimize process effluent and packaging waste.

**Note:** This publication, CIS-220, specifically describes the products available in the United States, Canada, and parts of Latin America. For Europe, the Middle East, and Africa, use the alternate publication, CIS-220E.

The product line consists of:
- KODAK EKTACOLOR PRIME SP Developer Replenisher LORR
- KODAK EKTACOLOR PRIME SP Bleach-Fix Replenisher LORR
- KODAK EKTACOLOR PRIME Stabilizer and Replenisher LORR

These chemicals feature reduced replenishment rates that minimize process effluent and packaging waste. The lower rates also mean less frequent chemical mixing in busy minilab environments. KODAK EKTACOLOR PRIME LORR Chemicals are intended for customers who have an average- to high-volume operation and can benefit most from these features.

**CHOOSING THE RIGHT CHEMICALS FOR YOUR MINILAB**

PRIME LORR Chemicals are designed for minilabs with the time and temperature specifications in the following table. See Kodak Alaris Publication Z-130, Section 3, Process RA-4: Using KODAK EKTACOLOR Chemicals in Minilabs for more details.

<table>
<thead>
<tr>
<th>Solution/Step</th>
<th>Time (Seconds)</th>
<th>Temperature °C (°F)</th>
<th>PRIME LORR Starting-Point Replenishment Rate mL/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer</td>
<td>45</td>
<td>37.8 ± 0.3 (100.0 ± 0.5)</td>
<td>80</td>
</tr>
<tr>
<td>Bleach-Fix</td>
<td>45</td>
<td>30 to 36 (86 to 97)</td>
<td>55</td>
</tr>
<tr>
<td>Stabilizer</td>
<td>90</td>
<td>30 to 37 (86 to 99)</td>
<td>4-Tanks 195 3-Tanks 390</td>
</tr>
</tbody>
</table>

The replenishment rates are starting point recommendations for KODAK EKTACOLOR EDGE and ROYAL Papers. If you are processing KODAK PROFESSIONAL ENDURA Premier Paper, you may need to increase the developer replenishment rate up to 10 percent to maintain process control aims.

The table below can help you determine the right choice for your operation. It shows which developer to choose based on the developer-tank volume and the number of 10.2 x 15.2 cm (4 x 6-inch) prints typically processed in a day. After choosing the developer, select the bleach-fix and stabilizer recommended for use with that developer. During periods of low utilization, you may need to increase the replenishment rate by 10 to 15 percent.

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**Note:** If your lab prints 8.9 x 12.7 cm (3.5 x 5-inch) prints, multiply the number of prints you make each day by 0.73 to find the equivalent number of 10.2 x 15.2 cm (4 x 6-inch) prints. Use that number to select your developer.

If you have identified EKTACOLOR PRIME SP Developer Replenisher LORR (for average- to high-production volume), use these chemicals:

- KODAK EKTACOLOR PRIME SP Developer Replenisher LORR
- KODAK EKTACOLOR PRIME Bleach-Fix Replenisher LORR or KODAK EKTACOLOR PRIME SP Bleach-Fix Replenisher LORR
- KODAK EKTACOLOR PRIME Stabilizer and Replenisher LORR

If you have identified EKTACOLOR RA Developer Replenisher RT (for low-production volume), use the following chemicals:

- KODAK EKTACOLOR Developer Replenisher RT
- KODAK EKTACOLOR RA Bleach-Fix and Replenisher
- KODAK EKTACOLOR PRIME Stabilizer and Replenisher LORR

* Use the stabilizer at a replenishment rate of 248 mL/m² (4 tanks) or 495 mL/m² (3 tanks).

Further information and guidance on managing low production volume conditions can be found in the technical publication CIS-246, “Operating Minilabs at low levels of utilization: C41 & RA4,” which is available at www.kodakalaris.com/go/professional.

### SAFE HANDLING OF PHOTOGRAPHIC CHEMICALS

Handle all chemicals carefully. When you mix solutions, wear goggles or a face shield, a protective rubber apron, and protective gloves made with neoprene or nitrile rubber. Clean protective clothing after use to remove any chemical residue that can cause contamination. For more information about potential health hazards and safe handling of specific KODAK chemicals, see the label and the Material Safety Data Sheet (MSDS) for the chemical. Consult the MSDS for regional contact information. MSDSs are available on the Kodak Alaris website at www.kodakalaris.com/es-mx/about/ehs

### ORDERING EKTACOLOR PRIME LORR CHEMICALS

EKTACOLOR PRIME LORR Chemicals are available in convenient mix sizes. The catalog numbers in the following table are for the United States, Canada, and parts of Latin America. The table shows the product details and the number of 10.2 x 15.2 cm (4 x 6-inch) prints that can be processed per case.

<table>
<thead>
<tr>
<th>Replacement Product</th>
<th>CAT No.</th>
<th>Makes</th>
<th>Prints</th>
</tr>
</thead>
<tbody>
<tr>
<td>KODAK EKTACOLOR PRIME SP Developer Replenisher LORR</td>
<td>864 4809</td>
<td>4 x 10 L</td>
<td>32,250</td>
</tr>
<tr>
<td>KODAK EKTACOLOR PRIME SP Bleach-Fix Replenisher LORR*</td>
<td>127 3812</td>
<td>2 x 10 L</td>
<td>23,480</td>
</tr>
<tr>
<td></td>
<td>844 4754</td>
<td>4 x 5 L</td>
<td>23,480</td>
</tr>
<tr>
<td></td>
<td>805 5949</td>
<td>10 gal</td>
<td>44,430</td>
</tr>
<tr>
<td>KODAK EKTACOLOR PRIME Stabilizer and Replenisher LORR</td>
<td>826 4442</td>
<td>12 x 10 L</td>
<td>39,730</td>
</tr>
<tr>
<td></td>
<td>866 9566</td>
<td>12 x 12.5 gal</td>
<td>188,000</td>
</tr>
<tr>
<td>KODAK EKTACOLOR PRIME SP Bleach-Fix Starter (to prepare fresh tank)</td>
<td>660 1090</td>
<td>One bottle will make 26.7 L total fresh tank</td>
<td>—</td>
</tr>
<tr>
<td>KODAK EKTACOLOR PRIME SP Bleach-Fix Starter (to prepare fresh tank)</td>
<td>660 1058</td>
<td>4 bottles, one bottle will make 24 L total fresh tank</td>
<td>—</td>
</tr>
</tbody>
</table>

### MANAGING EMPTY CONTAINERS

In most regions, it should be possible to participate in a local community recycling program. Check with program authorities to determine if these packaging materials are eligible for local recycling. If they are accepted, disassemble the package and place the bottles and corrugated material in your recycling bin. Follow all material preparation instructions from the recycler.

See Kodak Alaris Publication No. CIS-148, Recycling KODAK Photochemical Containers, for more information on preparing the empty bottles for recycling. CIS-148 and other publications on waste management are available on the Kodak Alaris website at www.kodakalaris.com/es-mx/about/ehs.

If local recycling is not an option, dispose of the empty bottles and the package with your normal solid waste.

### SILVER RECOVERY

Publications on silver management that include recommendations and descriptions of silver-recovery options are available in the Silver Management section of the Kodak Alaris website at www.kodakalaris.com/es-mx/about/ehs.
**PREPARING FRESH WORKING TANK SOLUTIONS**

**Developer Fresh Tank Solution**
To ensure good performance, take special care in mixing the developer tank solution. You should mix the developer replenisher in a separate mixing vessel from the one used for bleach-fix.

<table>
<thead>
<tr>
<th></th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKTACOLOR PRIME SP Developer LORR, mixed Replenisher*</td>
<td>500 mL</td>
</tr>
<tr>
<td>EKTACOLOR RA Developer Starter (CAT No. 6601090)</td>
<td>45 mL</td>
</tr>
<tr>
<td>Water</td>
<td>455 mL</td>
</tr>
<tr>
<td>Total volume</td>
<td>1.0 L</td>
</tr>
</tbody>
</table>

* Mixed as directed on the product label.

**Bleach-Fix Fresh Tank Solution**
Be very careful to avoid contamination of the developer with bleach-fix.

<table>
<thead>
<tr>
<th></th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKTACOLOR PRIME SP Bleach Fix LORR, mixed Replenisher*</td>
<td>950 mL</td>
</tr>
<tr>
<td>EKTACOLOR PRIME SP Bleach-Fix Starter (CAT No. 6601058)</td>
<td>50 mL</td>
</tr>
<tr>
<td>Total volume</td>
<td>1.0 L</td>
</tr>
</tbody>
</table>

* Mixed as directed on the product label.

**Stabilizer Fresh Tank Solution**
To prepare one liter of stabilizer tank solution, use mixed EKTACOLOR PRIME Stabilizer and Replenisher LORR with no further dilution.

**Adjusting Replenishment Rates**
At the time you convert to EKTACOLOR PRIME LORR Chemicals, you will need to adjust your replenishment rates to the settings given in the table below. We have included replenishment-rate adjustment procedures for several minilab models. If your equipment is not listed, check the processor manual or contact the equipment manufacturer for their recommendations.

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**Important**
If your equipment allows you to back up printer and paper processor data on a floppy disc or memory card, make sure you update your backup software after adjusting the replenishment rates. Otherwise, any future data transfer from your backup memory will revert to the previous replenishment rates and may cause incorrect replenishment.

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**Note:** The replenishment rates are starting point recommendations for KODAK EKTACOLOR EDGE and ROYAL Papers. If you are processing KODAK PROFESSIONAL ENDURA Premier Paper, you may need to increase the developer replenishment rate by 10 percent.

**Replenishment Rates for EKTACOLOR PRIME LORR Chemicals**

<table>
<thead>
<tr>
<th>Solution</th>
<th>mL/m* x 127 mm</th>
<th>mL/ft* x 127 mm</th>
<th>mL/m2</th>
<th>mL/ft2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIME SP Developer LORR</td>
<td>10.3</td>
<td>3.2</td>
<td>80</td>
<td>7.5</td>
</tr>
<tr>
<td>PRIME Bleach-Fix LORR and PRIME SP Bleach-Fix LORR</td>
<td>6.9</td>
<td>2.1</td>
<td>55</td>
<td>5</td>
</tr>
<tr>
<td>PRIME Stabilizer LORR (4 tanks)</td>
<td>25</td>
<td>7.5</td>
<td>195</td>
<td>18</td>
</tr>
<tr>
<td>PRIME Stabilizer LORR (3 tanks)</td>
<td>49</td>
<td>15</td>
<td>390</td>
<td>36</td>
</tr>
</tbody>
</table>

* mL per linear metre or foot.

**NORITSU Minilabs (2900, 3100 Series)**

1. From the main menu screen select “F.”
3. Enter your password if required, then press <YES>.
5. Move cursor to “Basic Replenisher Amount” or “Standard Replenishment Amount Settings.”
6. Enter the correct replenishment rates for each chemical (developer, bleach-fix, stabilizer). Press <YES> to accept the replenishment rates. Exit, and then return to this screen to make sure you have entered the correct replenishment rates.

**NORITSU Minilabs (2100, 2200, 2300, 2600, 2700 Series)**

1. From the main menu screen highlight “Extension” (if you see “Extension 1” and “Extension 2,” highlight “Extension 2”). Press <YES>.
2. Enter your password if required, then press <YES>.
4. Move cursor to “Basic Replenisher Amount.”
5. Enter the correct replenishment rates for each chemical (developer, bleach-fix, stabilizer). Press <YES> to accept the replenishment rates. Exit, and then return to this screen to make sure you have entered the correct replenishment rates.
NORITSU Minilabs (1001, 1201, 1701 Series)
1. Press <Mode> key.
2. Press <Paper> key (bottom row).
3. Press <D-IN> key.
4. Highlight the <NO> key until the “CD Basic Repl” screen appears.
5. Enter the new replenishment rate by using the number keys located on the bottom row.
6. Press <YES> key.
7. Press <NO> and the next screen, BF Basic Repl, will appear. Enter the new bleach-fix replenishment rate.
8. Press the <YES> key.
9. Press the <NO> key to go to the next screen, Stb Basic Repl. Enter the new stabilizer replenishment rate.
10. Review each screen to make sure you have entered the correct replenishment rates.

GRETAG Master Lab
1. To set the developer replenishment rate, press <SET>, enter your password, press <P-Proc>, press <REPRATE>.
2. Enter the correct replenishment rate for the developer. For GRETAG Master Labs, this will be 80 mL/m2.
3. Press <ENTER>.
4. To change the bleach-fix and stabilizer replenishment rates, press the following: <MAINT>, enter your password, <P. PROC>, <LIQUID>, <CALPUMP>.
5. Enter the bleach-fix <BLEACH> (55) and stabilizer <STAB> (390 for 3 countercurrent tanks) replenishment rates.
6. Measure and adjust the replenishment pump outputs to complete the rate change. Place one graduated cylinder for each replenisher on the frame of the paper processor. Put the replenisher tubes for each solution in the graduated cylinder.
7. Select <COMM>, <P.PROC>, <MANREPL>, <TEST>.
8. Check the volume in each graduated cylinder and compare them to the numbers that appear on this screen. If the volumes that the replenisher pumps deliver are different from the amounts on the screen, adjust the replenisher pumps to obtain the correct replenishment rates. Turn the adjustment screw on each pump to adjust the output—clockwise to increase the volume delivered or counterclockwise to reduce the volume.

FUJI SFA Series
1. Go to the “Processor Condition Settings” screen by pressing <5> <2> <START/YES>.
2. Press <2>, <START/YES> to get to the “Replenishment Rate Setting” (522) screen.
3. Using the arrow keys, move the cursor to the “Repl. Rate” column.
4. Set the replenishment rates by using the number keys.
5. Move the cursor to “Enter?” and select “Yes,” and press the <START/YES> key.

Depending on the standard replenishment rate setting you programmed, you may be unable to reduce your replenishment rates to the lower amounts required for EKTACOLOR PRIME LORR Chemicals. If your processor will not accept the low replenishment rates, change the default setting to a different standard replenishment rate.

To change the default setting:
1. On the main menu, press <SORT>, <1>, <7>, <MENU>, <7>, <7>, and <START/YES>.
2. On the “Installation Date Setting” screen, change the Process Code from 4 (CP40) to 1 (CP43). Highlight “1” with the arrow keys and press <START/YES>.

Then enter the lower replenishment rates.

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