

Using KODAK FLEXICOLOR Bleach III HV Regenerator / C-41



KODAK FLEXICOLOR Bleach III HV Regenerator / C-41 is designed to provide robust bleaching performance for high-volume processors of color negative films using Process C-41. The evaporation characteristics of a regenerated bleach system can vary due to the type of processor used and the utilization of that processor. KODAK FLEXICOLOR Bleach III HV Regenerator has been specifically formulated for use in high-volume processors, such as cine processors used by photofinishing laboratories.

KODAK FLEXICOLOR Bleach III HV Regenerator is similar in use to KODAK FLEXICOLOR Bleach III Regenerator. The replenishment rates are the same as for FLEXICOLOR Bleach III Regenerator. However, FLEXICOLOR Bleach III HV Regenerator uses half as much concentrate as FLEXICOLOR Bleach III Regenerator to regenerate a given amount of bleach overflow. The advantage for high-volume wholesale photofinishers is that they can mix larger batch sizes of regenerated replenisher while keeping less inventory of FLEXICOLOR Bleach III HV Regenerator. The cost of processing a roll of film is approximately the same as with FLEXICOLOR Bleach III Regenerator.

When using KODAK FLEXICOLOR Bleach III HV Regenerator, it is still very important to check the bleach replenishment rate and check that the bleach aeration is sufficient to ensure good performance of the bleach solution. See KODAK Publication Z-131, *Using KODAK FLEXICOLOR Chemicals*, for details. It is especially important to minimize the developer carryover when using this new regenerator. Excessive carryover can dilute the bleach and raise its pH, which reduces bleach activity. Keep the squeegees properly adjusted and maintained to minimize developer carryover.

Table A contains a comparison of how developer carryover affects the total iron level in a seasoned bleach tank.

TABLE A: Effect of Developer Carryover on the Total Iron of a Seasoned Bleach Tank

Developer Carryover (mls/ft ²)*	8	9	10 ¹	11	12
Total Iron for Bleach III HV (g/L)	4.77	4.35	4.00	3.70	3.44

¹10 mls/ft² of developer is considered normal for a cine-type processor.
*Assumes no evaporation and standard replenishment rate of 9.2 mls/ft.

Directions for using KODAK FLEXICOLOR Bleach III HV Regenerator are below.

For labs using the 150-gallon size of the new FLEXICOLOR Bleach III HV Regenerator, catalog number **852 8994**, the new mixing instructions for regenerating the bleach overflow solution are in Table B.

Table B

Amount of Bleach III Overflow Solution to Use	Amount of 150-gallon KODAK FLEXICOLOR Bleach III HV Regenerator to Add
75 gal	1/2 cubitainer (2.25 gal)
150 gal	1 cubitainer (4.5 gal)
300 gal	2 cubitainers (9 gal)

For laboratories that mix replenisher using the ROCKWELL Auto-Mixer using FLEXICOLOR Bleach III HV Regenerator in a 55-gallon drum, catalog number **892 5554**, a change must be made in the splitting of the concentrate to overflow ratio. The new mixing ratio is in Table C.

Table C

Instructions for Regenerating Overflow Using HV Regenerator	Bleach Overflow (mls)	Bleach III HV Regenerator (mls)
To make 1 L of Replenisher	971	29
To make 4.5 L of Replenisher in ROCKWELL Automixer	4369	131

Note: There is no change to the bleach replenishment rate for processors when using the new FLEXICOLOR Bleach III HV Regenerator. The replenishment rate is still 9.2 ml per linear foot of 135-size film (30ml/M). For further details, see Kodak Publication Z-131, *Using Kodak FLEXICOLOR Chemicals*.

Using KODAK FLEXICOLOR Bleach III HV Regenerator / C-41

Process Control

Once converted to FLEXICOLOR Bleach III HV Regenerator, it will take several weeks to "season" a bleach working tank when using this new regenerator. Process control should be maintained as usual, processing and recording least two control strips a day or more.

Although FLEXICOLOR Bleach III HV Regenerator is designed specifically for the evaporation characteristics of a high-volume processor, evaporation is hard to predict. If the concentration of the bleach system is increased due to evaporation, there would be no decrease in the bleach performance; but it may lower the volume of the bleach system enough to reduce the amount of overflow available to regenerate. An optional monitoring procedure for checking the concentration of the bleach system is recording the specific gravity of the bleach overflow before regenerating and adjusting it to the correct specific gravity. Use the following procedure:

1. Measure specific gravity of bleach overflow at room temperature (77° F / 25°C).
2. Use Table D to calculate the amount of bleach overflow to remove and replace with water. For the total amount to add, multiply the ml/L by the number of liters in the tank.
3. Remove the amount of bleach overflow calculated from Step 2 and replace with water. Make sure water is at room temperature, not cold.
4. Add Bleach III HV Regenerator as per mixing instructions, stir until completely mixed.

Table D

Specific Gravity	mls of Water per Liter of Overflow
1.050	None
1.055	None
1.060	None
1.065	150
1.070	210
1.075	260
1.080	310
1.085	350
1.090	380
1.095	420
1.100	450

MORE INFORMATION

For the latest version of technical support publications for KODAK Products, visit Kodak on-line at:
<http://www.kodak.com>

If you have questions about KODAK Products, call Kodak.

In the U.S.A.:

1-800-242-2424, Monday–Friday

9 a.m.–7 p.m. (Eastern time)

In Canada:

1-800-465-6325, Monday–Friday

8 a.m.–5 p.m. (Eastern time)

Consumer Imaging
EASTMAN KODAK COMPANY • ROCHESTER, NY 14650

