

Ten Tray Layout. 3 liter 11x14 trays. Fiber or RC.

#	10	9	8	7	6	5	4	3	2	1
Name	“Clean” Wash	“Dirty” Wash	HypoClear	Toner	Rinse	Second Fix	Rinse	First Fix	Stopbath	Developer
ANAG	H2O	H2O	KHCA	KRST	H2O	KRF(A)	H2O	KRF(A)	KISB/KESB	DEK
Chemical Fiber/ RC	Rinse Water from the Kodak Syphon.	Water (overflow from clean wash)	Kodak Hypo clearing Agent/ RC prints Plain Water	Kodak Rapid Selenium Toner/ RC prints Plain Water	Water Slow Rinse	Kodak Rapid fix A	Water Slow Rinse	Kodak Rapid Fix A	Kodak Indicator Stop Bath/ Or Kodak Ektaflo Stop Bath (KESB) quart cubetainer	Dektol(D72) 3 grams Metol 45 Sodium Sulfite 12 Hydroquinone 80 Sodium Carbonate (mono) 2 Potassium Bromide
Active Chemical			<i>Sodium Sulfite, Sodium Bisulfite</i>	<i>Sodium Selenite</i>		<i>Ammonium thiosulfate Sodium acetate Boric acid Acetic acid</i>		<i>Ammonium thiosulfate Sodium acetate Boric acid Acetic acid</i>	<i>Acetic Acid</i>	
Dilution 3 liter trays (96 oz each)			20 oz (600 cc's)	6 oz 9.6 Archival 3-12 oz		12 oz		12 oz	1.5 oz (1:64)/3oz Ektaflo (1:31)	32 oz for 1:2 24 oz for 1:3 48 oz for 1:1
Time Fiber	3-20 m	3-20 m	3-20 m	3-20 m	3 m	3-5 m	3 m	3-5 m	10 s	2 m
Time RC	1-4 m	1-4 m	1-4 m	3-4m	1 m	1 m	1 m	1 m	10 s	1 m
Agitation		Running water dumped over from the clean wash		Agitate for at least the first 10" and afterward when ever convenient.	Change water every 25 prints or keep it running.	Immerse quickly. Agitate for at least the first 10".	Start water running once all trays are filled	Immerse quickly. Agitate for at least 15". Lights	Immerse quickly not getting stop on the developing tongs.	Immerse face down and quickly agitate for half a M Lift drain turn over and agitate another half M. Repeat. Drain last ten seconds
Capacity			About 96 prints per tray.	32 Prints per oz of straight liquid. 3 ounces in the tray would give you 96 prints.		96 Fiber Prints per tray. (50-150) (1 print per diluted oz) twice that for RC.		96 Fiber Prints per tray. (50-150) (1 print per diluted oz) twice that for RC.	Till it turns purple. Est 52 prints	An ounce of stock developer per (8x10) print. So 32oz in the 96 oz total tray makes 32 prints.
Note				<i>Split toning will occur at higher dilutions with warmer papers.</i>		<i>No hardener "B".</i>		<i>Replace with Second fix after 96 fiber prints. No hardener "B".</i>		<i>If tone appears-be still rapidly changing then it needs to develop longer.</i>
Temperature	65-72°	65-72°	65-72°	68-78°	65-72°	65-72°	65-72°	65-70°	65-70°	66-72°
Cost analysis: Bottom line	Cost per Tray \$1.43 Dektol \$.52 KESB \$1.20 KRF(A)1 \$1.20 KRF(A)2 \$3.38 KRST \$.84 KHCA \$8.57 Total fiber \$4.35 Total RC <i>RC has no KRST or KHCA</i>	Print per Tray \$.044 Dektol \$.01 KESB \$.0125 KRF \$.0125 KRF \$.035 KRST <u>\$.008 KHCA</u> 13.1 ¢ fiber print 26.2¢ 11x14 fiber print cost 8.8¢ RC Print Cost 17.7¢ 11x14	From a \$5.40 one gallon concentrate 84¢ Tray Cost 84¢/96= <u>\$.008 Print Cost</u>	6 oz from a Quart \$18 (56¢ an oz) bottle of KRST 3.38Tray Cost \$3.38/96= 3.5¢ Print Cost		From a \$64 five gallon cubetainer 12 oz = \$1.20 Tray Cost \$1.20/92= 1¢ Print Cost but then it is used again!		From a \$64 five gallon cubetainer 12 oz = \$1.20 Tray Cost \$1.20/92= 1¢ Print Cost	From a \$22 one gallon Ektaflo Cubetainer 3 oz = 52¢ Tray Cost .52/52= 1¢ Print Cost	From a \$5.70 gallon packet of Dektol. 32 oz = \$1.43 Tray Cost \$1.43/32= 4¢ Print Cost

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An “m” is a minute. An “s” is a second.

I have this chart hung over my sink in my darkroom. I have a larger sink. It is 18 ft across. The drain is on the left so my trays are set up to run from right to left which is not uncommon.

This chart reflects this. It just takes a moment to get used to it. Someday well make a chart for the rest of the world that runs the more obvious left to right for western readers.

A “Print” is defined here and typically as an 8x10 print or 80 square inches.

A tray of Dektol with 32 oz of Dektol stock in it will run

32 8x10's,

16 11x14's or 64 5x7's.

larger prints would require larger trays which would contain more liquid.

On the use of KRST.

According to Grant Haist former director of research at Kodak I'd get in my 96 oz trays 52 prints archival or 150 or “commercial” per tray out of my tray. So the 96 prints I have indicated seems to be the average of that. But the point being that for true archival perhaps it's best to be a tad more conservative than the 96 prints I have indicated per tray in the KRF.

52 “prints”.

So that's

104-300 5x7's.

52-150 8x10's,

26-75 11x14's

larger prints would require larger trays which would contain more liquid.

I commonly mix up Paterson 11x14 trays which comfortably hold 3 liters of liquid and are 15 inches on the narrow side. I typically make 11x14 fiber prints.

If I am making 8x10 RC contact sheets I use the same trays in the same layout but omit the chemicals from the Toner and Clear; trays 7 and 8. Those two trays then become water trays. So after the second Fix I have 5 water trays! It is barely necessary to have the water running in your wash for this type of arrangement! I'll have it running at a trickle. These ten trays with a squeegee glass take up 14 feet out of my 18 ft sink, a luxurious arrangement that many will not be able to swing in their space unless they go with smaller trays. A common work around and what I do when I print 16x20's or 20x24's is to do two runs....come back for a “Laundry” run.

Your first run is you go through your first or second fix. Then you either let your prints soak overnight or lay them out on your plastic dryer screens. Then next morning you do the second half of your run: trays 6-10 I think it's ok to let your fiber prints soak 8 hours. Others don't. The paper's I use which are Ilford Multigrade papers respond fine to this treatment. The sizing or whiteners of others papers might leach out too much so squeegee and dry them.

RC prints should not be wet much longer than 15 minutes. Sometimes I'll hang them up with cloths pins instead of taking the trouble to squeegee and lay them out on drier screens.

These Patterson trays I use come in colors; red white and beige. This explains the colored type I sued on this chart which as it hangs on my darkroom wall provides a visual aid to me. The black type is for the white trays. For different sized trays you'd have to do the math as to how much chemistry I use per liter to convert to the amount of liters you have in your trays.

Some recent evidence has us thinking that we need at least 3.2 ounces of Selenium toner per liter for 3 minutes. So that's 9.6 per 3 liter tray.

This will result in noticeable color change in some papers.

Please email for corrections or ideas.

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