AddPhotographic Formulae1 2c1

At this dilution, FR-4 is a proportional reducer for film and paper. Apply with a brush to locally improve print highlights, or treat an entire film to reduce overall negative density. Use solutions in sequence or mix 1+1 just prior to use. Solution A will last for months, but if combined with solution B, the mixture will deteriorate within 10 minutes. Rinse film or paper thoroughly after use. Then, fix again and continue with normal processing.

Farmer's Reducer (FR-4)

Solution A	
potassium ferricyanide	10 g
water to make	1,000 ml
Solution B	
rapid fixer working solution	1,000 ml

use solutions in sequence or mix 1+1 just prior to use

FT-1 is a fixer test solution when archival processing is not required. Add 1 ml to 10 ml of used fixer and stir, and discard the fixing bath if a cloudy, white precipitate forms in the mixture. For archival processing requirements, measure the silver content of the fixing bath with a professional silver estimator.

Fixer Test Solution (FT-1)

water	80 ml
potassium iodide	5 g
water to make	100 ml

add 1 ml to 10 ml of used fixer

RHT-1 is a residual hypo test to verify the efficiency of film washing. 1 ml of the test solution is applied to 10 ml of the film's last wash water. The resulting color change of the wash water depends on its thiosulfate content and becomes a rough measure of the emulsion's residual thiosulfate level.

Residual Hypo Test (RHT-1)

distilled water	80 ml
potassium permanganate	0.1 g
sodium carbonate monohydrate	0.2 g
distilled water to make	100 ml

add 1 ml to 10 ml of the film's last wash water

RHT-2 is a residual hypo test to verify the efficiency of print washing. The color stain left by the test solution is an indicator of the hypo level in the paper. HT2 contains light sensitive silver nitrate. Consequently, the entire test must be conducted under subdued tungsten light. Please note that silver nitrate requires 24 hours to completely dissolve.

Residual Hypo Test (RHT-2)

water	80 ml
acetic acid 28%	12 ml
silver nitrate	0.8 g
water to make	100 ml

apply a drop to a damp print border for 5 minutes

SB-1 is the standard acid stop bath for film and paper processing. It's ideal when used in combination with acetic-acid based fixers. It quickly neutralizes the alkaline developer and brings development to a complete stop. Its capacity is approximately ten rolls of film or 8x10-inch prints per liter.

Stop Bath (SB-1)

water	750 ml
acetic acid 28%	48 ml
water to make	1,000 ml

working solution for paper and film processing

Rodinal is a medium-grain, general-purpose film developer for maximum sharpness and acutance. It was formulated in 1880 by Agfa and still is a standard by which all other developers are judged.It is the oldest still commercially available film developer. Many deviations from this original formula have been proposed over the years. Iis diluted from 1+25 to1+100 and has the reputation of havinga shelf-life of several decades.FX37/39 are modern alternatives to AgfaRodinal.

Film Developer (Agfa Rodinal)

distilled water 50°C / 120°F	200 ml
sodium sulfite anhydrous	50 g
sodium hydroxide	20 g
paracetomol (Tylenol 30 500mg tablets)	15 g
cold distilled water to make	250 ml

after

dilute just like the original Agfa Rodinal from 1:25 to 1:100

WA-1 is a wetting agent very similar to Kodak Photo-Flo. It reduces water tension, allowing the water to quickly run off the film without leaving ugly water spots. After washing, soak the film in a solution of distilled water and wetting agent for about 1 minute. After hanging, remove excess water by running the film through your fingers.

Wetting Agent (WA-1)

propylene glycol	25 ml
polyethylene glycol octylphenyl ether*	7.5 ml
water to make	100 ml

dilute 1+999 for film processing
very similar to Kodak Photo-Flo
* also available as 'Triton X-100' and alternatively 'Tween 20'

SIS-1 is a silver-image stabilizer with a formulation very close to Agfa Sistan. RC or FB prints are treated for 1 minute after archival toning and washing. The stabilizer solution is wiped off, and prints are not to be washed again. The stabilizer remains in the emulsion ready to react with any oxidized silver to prevent discoloration. Silver-image stabilizers are not a replacement for toning but offer additional image protection.

Silver-Image Stabilizer (SIS-1)

distilled water	750 ml
potassium thiocyanate	95 g
polyethylene glycol octylphenyl ether*	25 ml
distilled water to make	1,000 ml

dilute 1+19 for paper processing
very similar to Agfa Sistan
* also available as 'Triton X-100' and alternatively 'Tween 20'

BPH-9 is a buffer and storage solution with a pH value of 9.2 for standard pH meter electrodes. It helps to occasionally recalibrat-eyour PHmeter.

Buffer Solution (BPH-9)

distilled water	50 ml
borax	0.5 g
distilled water to make	100 ml

calibration solution of pH9.2

LC-1 is an extra safe lens cleaner,leaving no streak or smudges on eye glasses,filters,camera lenses or similar optics. After cleaning off any lose debris,sand or dust;Spray a small amount on a soft cloth orclean lint-free piece of paper and wipe the lens from the center to the out-side in a circular motion. Use another piece to wipe off any residue. Never sray any liquid directly on the lens just on cloth or paper!

Lens Cleaner (LC-2)

windex,Frosch oder Sidolin*	20ml
isopropylic alcohol & distl. water to make	100 ml

any household streak-free glass cleaner will do.

Crawley (FX37/39)

distilled water 50°C / 120°F	250 ml
sodium sulfite (anhydrous)	60g
hydroquinone	5 g
sodium carbonate (Tanhydrous)	5 g
phenidone	0.5 g
borax	2.5g
potassium bromide	0.5g
cold distilled water to make	1,000 ml

dilute just like the original Agfa Rodinal from 1:25 to 1:100
use as one-shot developer for processing consistency

Wetting Agent (WA-1)

propylene glycol	25 ml
polyethylene glycol octylphenyl ether*	7.5 ml
water to make	100 ml

dilute 1+999 for film processing
very similar to Kodak Photo-Flo
* also available as 'Triton X-100' and alternatively 'Tween 20'

Silver-Image Stabilizer (SIS-1)

distilled water	750 ml
potassium thiocyanate	95 g
polyethylene glycol octylphenyl ether*	25 ml
distilled water to make	1,000 ml

dilute 1+19 for paper processing
very similar to Agfa Sistan
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SIS-1 is a silver-image stabilizer with a formulation very close to Agfa Sistan. RC or FB prints are treated for 1 minute after archival toning and washing. The stabilizer solution is wiped off, and prints are not to be washed again. The stabilizer remains in the emulsion ready to react with any oxidized silver to prevent discoloration. Silver-image stabilizers are not a replacement for toning but offer additional image protection.

Sulfide Toner (Viradonal)SFT-9

water 50°C / 120°F	750 ml
black salt(Kala Namak)	20 g
sodium carbonate monohydrate	2.5 g
cold water to make	1,000 ml

working solution for direct paper toning tone for 2-8 minutes

SFT-9 is a simplifieddirect sulfide toner for modern papers, similar to Kodak Brown Toner or Agfa Viradon, and can be used at room temperature. Wash fiber-base prints for 30 minutes without washing aid prior to toning. Please note that this toner produces toxic hydrogen sulfide gas, as well as the offensive odor that goes along with it. Only use with adequate ventilation.WithFB papers stop toning before fully toned because, toning will continue during the final wash(after-toning).

BPH-7 is a buffer and storage solution with a pH value of 7 for standard pH meter electrodes. It prevents the electrodes from drying out and maintains their reference potential.