The above sequence can be repeated if the negative is not sufficiently reduced.

For a general reduction of negative fog, dilute Working Solution A with an equal volume of water and use the above procedure.

PHOTOGRAPHERS'
FORMULARY INC.

PO Box 950 • Condon MT 59826 • 406-754-2891 • FAX 406-754-2896
E-MAIL formulary @montana.com

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FORMULARY REDUCER 1 FOR NEGATIVES

To make 1/2 liter of potassium ferricyanide solution and 2 liters of sodium thiosulfate (hypo) solution.

The chemicals in Reducer 1 are used to prepare two stock solutions. Depending on how the stock solutions are mixed and used, Reducer 1 can be used for either sub-proportional or proportional negative reduction. Sub-proportional reduction removes silver density from the low-density areas faster than from the high-density areas, thus increasing the negative's contrast. Proportional reduction removes silver density from all areas, thus improving overdeveloped negatives.

Using a reducer correctly is an art and requires experience. We strongly urge you to practice with this reducer using scrap negatives before attempting reduction of a negative of value.

CHEMICALS CONTAINED IN THIS KIT

Chemical	Amount
Potassium Ferricyanide	37.5 g
Sodium thiosulfate, anhydrous	370 g

CHEMICAL SAFETY

All chemicals are dangerous and must be treated with respect. Please read the chemical warnings on each package. None of the chemicals in Reducer 1 need special attention.

POTASSIUM FERRICYANIDE: In spite of the fact that this compound contains cyanide, it is not particularly toxic. The reason is that the cyanide groups are bound to the iron atom and are not free to act as a poison.

Consult with local sewer and water authorities regarding proper disposal of darkroom chemicals in your area.

The user assumes all risks upon accepting these chemicals. IF FOR ANY REASON YOU DO NOT WISH TO ASSUME ALL RISKS, PLEASE RETURN THE CHEMICALS WITHIN 30 DAYS FOR A FULL REFUND.

MIXING THE STOCK SOLUTIONS

To mix and store Stock Solution 1, you will need a 500-ml container and a mixing bowl. For Stock Solution 2, you will need a 2-liter container. If you do not have a 2 liter container, then use a gallon jug or first mix Stock Solution 2 in a suitable container and transfer it to two 1 liter containers for storage. Alternatively, you can mix about one-half of Solution 2 at a time (exact measure is not critical).

Stock Solution 1

Chemical	Amount
Distilled water (20°C/68°F)	300 ml
Potassium ferricyanide	37.5 g
Distilled water	to make 500 ml

Place the water in a mixing bowl and add the potassium ferricyanide. Stir the solution until the solid has dissolved. Add water to bring the total volume up to 500 ml. Stir the solution to ensure it is homogenous, and then transfer the solution to its storage container.

Stock Solution 2

Chemical	Amount
Distilled water (52°C/125°F)	1700 ml
Sodium thiosulfate, anhydrous	370 g
Distilled water	to make 2000 ml

Place the warm water in a suitable mixing container and add the solid. Stir or swirl the mixture until the solid has gone into solution. It takes a reasonable period of time to dissolve the solid. Therefore, you may find it convenient to let the mixture stand and simply stir it occasionally. (Anhydrous sodium thiosulfate takes longer to dissolve than pentahydrate.)

After the solid has dissolved, add sufficient water to bring the total volume up to 2 liters. Stir or swirl the solution to ensure that it is homogenous, then transfer it to its storage container.

USING REDUCER 1

AS A SUB-PROPORTIONAL REDUCER

When used as a sub-proportional reducer, Reducer 1 is similar to Kodak's R-4a.

Working Solution

Chemical	Amount
Stock Solution 1	30 ml
Stock Solution 2	120 ml
Distilled water	850 ml

Do not mix the working solution until it is needed because it will deteriorate in about 5 minutes. If you do not need a liter of working solution then use half (or less) of the recommended volumes.

Pre-soak a well-fixed and washed negative in water. Mix and place the working solution in a white tray. Immerse the negative in the solution, then rock the tray gently and watch the negative closely. Reduction is fast and accelerates once it has started.

When the negative has been reduced to the desired point, remove it from the working solution, wash it thoroughly with water. It is best to remove the negative just before the desired point is reached because some reduction will occur while the negative is being transferred to the water wash. (If you find the action of the reducer too fast, prepare the working solution with twice the recommended volume of water.)

AS A PROPORTIONAL REDUCER

When Reducer 1 is used as a two-bath reducer, proportional reduction can be achieved. When used in this manner, Reducer I is similar to Kodak R-4b.

WORKING SOLUTIONS

Working Solution A	Amount
Stock Solution 1	93 ml
Distilled Water	to make 1000 ml

Working Solution B	Amount
Stock Solution 2	833 ml
Distilled Water	to make 1000 ml

Immerse the negative in Working Solution A for one to four minutes. Agitate the solution so that the surface of the negative is continually bathed in fresh solution. The exact time of immersion in Working Solution A determines the extent of the reduction and must be determined by experience. After bathing the negative in Working Solution A, transfer it to Working Solution B and soak it for at least 5 minutes with occasional agitation. After reduction, wash the negative thoroughly.