USING THE DEVELOPER

For full strength, develop the print for 3-4 minutes with undiluted working solution at 20°C/68°F. Stop, fix, wash, and dry the developed print in the normal manner.

For softer results, the working solution can be diluted up to 15 times with water. With the diluted developer, the development times will have to be lengthened--up to 10 minutes for the highest dilution. To decrease the chances of fogging the print, it is advisable to carry out the longer developments without a safety light. Stop, fix, wash, and dry the print in the normal manner.

PHOTOGRAPHERS' FORMULARY INC.

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Cat. No. 02-0030
Cat. No. 02-0040
Cat. No. 02-0041

PHOTOGRAPHERS' FORMULARY

FORMULARY AMIDOL PAPER DEVELOPER

Directions for mixing and using FORMULARY AMIDOL PAPER DEVELOPER: kit sizes, 1 liter (Catalog number 02-0030); 2 liters (Catalog number 02-0040); and 4 liters (Catalog number 02-0041).

Amidol is regarded as one of the finest developers available. It produces rich, strong, black tones, which are slightly cool. Amidol works best on bromide paper where it produces a pleasing tonal range. It can be used at high dilution and yet maintain good print color. Soft-high key prints are especially beautiful when processed in a diluted amidol developer. Because of its unique developing qualities, amidol is the favorite developer of photographers who exhibit their prints. Although amidol is an excellent developer, it has a number of drawbacks. It is toxic and expensive. It does not keep well in solution. (Its useful life is about 2-3 hours.) And because amidol stains everything it comes into contact with, it is not pleasant to work with.

Formulary Amidol Paper Developer is very similar to Formulary Edward Weston's Paper Developer (Catalog number 02-0010). Weston’s amidol developer contains citric acid and more restrainer (potassium bromide) than does Formulary Amidol Paper Developer. The additional restrainer in Weston’s Amidol Developer results in prints with greater contrast. Because Formulary Amidol Paper Developer is not acidic, it is a more vigorous developer than is Weston's Amidol.

CHEMICAL SAFETY

All chemicals are dangerous and must be treated with respect. Please read the chemical warnings on each package.

Amidol is a poison and must be used with caution. It is probably absorbed through the skin so the use of tongs or disposable rubber gloves is recommended when working with amidol solutions.
Amidol stains. Staining is due to the air oxidation of the free base of amidol, which is present in neutral or basic solution. Soap, for example, is sufficiently alkaline to cause the amidol hydrochloride salt to be converted to the free base, which will then oxidize rapidly forming the staining products. In cleaning a darkroom after amidol use, first wash with water (amidol is very water-soluble) and then wash with a 2% solution of hydrochloric acid. The acid wash ensures that the amidol remains in the salt form. Once amidol has been oxidized and has stained, there is not much that can be done.
If an amidol solution should be spilled on the skin, wash the area first with water, then a 2% solution of hydrochloric acid, and finally with soap and water.

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 FOR A FULL REFUND.

Please consult with local sewer and water authorities regarding proper disposal of darkroom chemicals.

MIXING THE SOLUTIONS

Amidol is stable as a dry chemical but deteriorates rapidly when in solution. Therefore a stock solution without amidol is prepared first. When a working solution is desired, solid amidol is mixed with the stock solution. Several packets of amidol are included in the kit so that it will not be necessary to use all the amidol in a single working session.

Stock Solution

You will need a brown bottle with a 1-liter (2- or 4-liter) capacity. To mix the solutions you will need a l0-ml (or 25-ml) and a 100-ml graduated cylinder.

Chemical	Kit Size		
	1 liter	2- liters	4 liters
Distilled water (52°C/125°F)	500 ml	1000 ml	2000 ml
Sodium sulfite	44 g	88 g	176 g
10% potassium bromide solution	6 ml	12 ml	24 ml
Cold distilled water to make	1000 ml	2000 ml	4000 ml

10% Potassium Bromide Solution. Regardless of the size of your kit, you will find a 10-g packet of potassium bromide. Place the solid potassium bromide in a 100-ml graduated cylinder and add water to the 100-ml mark. Be sure to stir the solution thoroughly after the solid has dissolved to ensure that it is homogeneous before using it to prepare the stock solution. You will only use a small portion of this solution; the remainder can be discarded. The 10%-potassium bromide solution is mixed in this manner for convenience and accuracy.
Place the warm water in the storage container and add the sodium sulfite followed by the 10% potassium bromide solution.
Stir the solution until the sodium sulfite dissolves. Add the final portion of water and then stir the final solution to make sure that it is homogeneous.

Working Solution

Your kit will contain either 3.3 g or 6.6 g packages of amidol. To prepare the working solution, add the solid amidol directly to the stock solution. The temperature of the stock solution must be no warmer than 20°C/68°F. Use one of the following dilutions:

Amidol	Stock Solution
3.3 g	500 ml
6.6 g	1000 ml

LIFE OF SOLUTIONS

The stock solution is stable in excess of six months. The working solution has a useful life of only 2-3 hours and must be discarded at the end of the working session.