

CATALOG NUMBER 01-0053 TO MAKE 1 LITER
CATALOG NUMBER 01-0054 TO MAKE 2 LITERS
CATALOG NUMBER 01-0055 TO MAKE 4 LITERS

PHOTOGRAPHERS' FORMULARY

FORMULARY D-25 FINE GRAIN FILM DEVELOPER

Formulary D-25 Fine Grain Film Developer is a fine-grain film developer that contains metol and a mild silver solvent, sodium metabisulfite. The grain obtained with D-25 resembles that obtained with Developer 12. However, D-25 contains metol rather than the toxic p-phenylenediamine found in Developer 12. Contrast is normal with D-25, but softness may result.

D-25 is reputed to be a non-staining developer; however, staining and dichroic fog have been reported with modern fine-grain films. Therefore, the developer should be tested with your current film before this developer is used extensively.

The chemicals in this kit are used to prepare a working solution that has a shelf life of 6 months. A liter of working solution is used to process 4 rolls of film. The capacity is extended to 25 rolls per liter by using the replenisher, Formulary DK-25R.

CHEMICALS CONTAINED IN THIS KIT

KIT SIZE

Chemical	1 liter	2 liters	4 liters
Metol	7.5 g	15 g	30 g
Sodium Sulfite	100 g	200 g	400 g
Sodium Metabisulfite	15 g	30 g	60 g

FOR YOUR CHEMICAL SAFETY

All chemicals are dangerous and must be treated with respect. Please read all chemical warning labels on each package.

Some individuals become sensitized (develop allergic symptoms or rashes) when using metol. If this should occur, discontinue use and consult a physician.

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 WORKING SOLUTION

You will need a suitable storage container, glass or plastic, with a capacity dependent upon kit size. We recommend you wear a dust mask, splash goggles, rubber gloves and a vinyl apron anytime you are mixing dry chemicals.

FOR BEST RESULTS, USE DISTILLED WATER.**Working Solution:**

Chemical	1 liter	2 liter	4 liter
Water (52° C/125° F)	750 ml	1500 ml	3000 ml
Metol	7.5 g	15 g	30 g
Sodium Sulfite	100 g	200 g	400 g
Sodium Metabisulfite	15 g	30 g	60 g
Cold water to make	1000 ml	2000 ml	4000 ml

Place the warm water in the storage container and add a pinch of sodium sulfite. (The sodium sulfite minimizes the initial oxidation of the metol. If more sulfite is added at this point, the metol will not dissolve.) Add the metol and stir, making sure all the metol has completely dissolved. Add each chemical in the order given making sure each dissolves completely before adding next. Finally add cold water to bring the final volume in the container up to the kit size volume and stir to ensure the solution is thoroughly mixed.

LIFE OF THE SOLUTION

Unused Developer 25 has a shelf life of about 6 months in a full and tightly capped bottle.

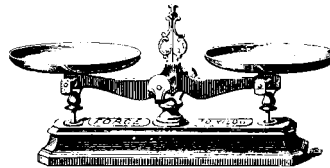
CAPACITY AND REPLENISHMENT

The capacity of the developer is 4 rolls (320 square inches) per liter. The capacity can be extended to 25 rolls per liter by replenishment with DK-25R Replenisher (catalog number 01-0057). Add replenisher at a rate of 38 ml per liter of developer for each roll of film developed for the first 13 rolls developed, then add 23 ml of the replenisher per liter of developer per roll developed.

Discard the developer after 25 rolls have been developed or at the end of one month from its first use, whichever comes first.

USING THE DEVELOPER

We recommend a development time of 15 - 20 minutes with agitation each minute. Follow your normal develop, stop, fix, wash, clear and wash procedure. Developer 25 can be used at 25° C/77° F; however the development time should be shortened to about 11 minutes. The negative will still have fine grain and low to medium contrast.



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