

Diafine two-bath film developer

Diafine is usable over a wide temperature range with *one developing time for all films*. Fast, medium and slow films can now be developed simultaneously without adjustment in developing time. All films with the exception of a few extremely slow emulsions are automatically developed to normal contrast. Time and temperature have no practical effect if the minimum recommendations are observed.

Diafine film developer is unsurpassed in its ability to produce greatest effective film speed, ultra-fine grain, maximum acutance and highest resolution. It is a characteristic of Diafine film developer to permit the widest latitude of exposure without the necessity of time-temperature compensation.

PREPARATION

Diafine is supplied in dry powder form to make two separate solutions (A & B). The two powders contained in a carton of Diafine are to be prepared and used separately.

Dissolve the contents of the smaller can (solution A) in water (75 to 85°F) to make the volume specified on the carton. Dissolve the contents of the larger can to make an equal amount of solution B. Label the storage containers clearly. For maximum consistency and stability, we recommend the use of distilled water. As with any photographic developer, all storage and processing equipment must be clean.

In use, the solutions will become discolored and a slight precipitate may form which in no way

will affect the working properties of Diafine. The precipitate may be removed if desired by filtering.

TIME and TEMPERATURE

Diafine may be used within a temperature range of 70 to 85°F with a minimum time of 3 minutes in each solution. Increased developing times will have no practical effect on the results. It is recommended that you do not exceed 5 minutes in either solution.

DEVELOPING PROCEDURE

Do Not Pre-Soak Films

Any type of tank or tray may be used.

1. **Immerse film** in Solution A for at least 3 minutes, agitating very gently for the first 5 seconds and for 5 seconds at 1 minute intervals. Avoid excessive agitation as this may cause some loss of shadow detail
2. **Drain, but do not rinse.**
3. Immerse film in Solution B for at least 3 minutes, agitating gently for the first 5 seconds and for 5 seconds at 1 minute intervals. Avoid excessive agitation.
4. Drain and rinse in plain water for about 30 seconds. (We do not recommend the use of an acid stop bath).
5. Fix, wash and dry in the usual manner.

Optimum results are obtained if all solutions, including the wash, are maintained at the same temperature. Care must be exercised to prevent any amount of Solution B from entering Solution A.

REPLENISHMENT

Diafine does not require replenishment. It is an extremely stable formula and has an unusually long work life, if normal precautions are taken against contamination.

When necessary, the level of the solutions can be maintained by the addition of fresh Diafine. Add *equal amounts* of fresh A and B to their respective working solutions. Since the introduction of dry film into Solution A decreases the volume of A more rapidly than that of B, some of the B will have to be discarded before adding the fresh B solution.

CONTRAST CONTROL

Because Diafine is a true two-bath developer, each film type is developed to a fixed degree of contrast, and changes in the developing times will have no practical effect on the final results. The chart listings will produce negatives of normal density and contrast (gamma 0.65 to 0.75) at the recommended exposure indexes.

Some control of high contrast subjects is possible by lowering the exposure index. Because Diafine has the property of limiting highlight development, increased exposures result in higher shadow densities without highlight "blocking," thus effectively extending the tonal range. Diafine can accommodate as much as a two stop increase over the recommended indexes, without serious loss of quality. The increase in contrast in flat subject matter is not possible with Diafine.

35mm & Roll Films

	Exposure Index
Kodak T-Max 100 - 35mm	160
Kodak T-Max 400 - 35mm	500
Kodak T-Max 100 - 120	200
Kodak T-Max 400 - 120	640
Kodak T-Max P3200 - 35mm	1250
Kodak Tri-X	1600
Kodak Tri-X Professional - 120	1000
Kodak Plus-X	400
Kodak Panatomic-X	160
Kodak Verichrome Pan	400
Kodak Royal-X Pan	2400
Ilford Pan-F Plus - 35mm	80
Ilford Pan-F Plus - 120	100
Ilford Pan-F - 35mm	125
Ilford FP-4 - 35mm	320
Ilford FP-4 Plus - 35mm	250
Ilford FP-4 Plus - 120	250
Ilford Delta 100 - 35mm	80
Ilford Delta 400	320
Ilford Delta 400 Professional	400
Ilford HP-5 - 35mm	800
Ilford HP-5 Plus - 35mm	800
Ilford HP-5 Plus - 120	800
Agfa APX-100 - 35mm	200
Agfa APX-100 - 120	250
Agfa APX-25 - 35mm	40

Agfa APX-25 - 120	50
Neopan 400 - 35mm	640
Neopan 1600 - 35mm	2400
Agfapan 400	800
Agfapan 100	320
Agfapan ISS	320

Sheet Films

	Exposure Index
Kodak T-Max 100	160
Kodak T-Max 400	640
Kodak Royal-X Pan	3000
Kodak Royal Pan	2000
Kodak Tri-X	1200
Kodak Super XX	800
Kodak Plus-X	400
Kodak Panchro Press B	500
Kodak Portrait Pan	400
Kodak Ektapan	400
Ilford FP-4 Plus	200
Ilford HP-5 Plus	640
Ilford Delta 400	400

Fotohuis recommended film-Diafine combinations for push processing:

Tri-X (400): iso 1250
 HP5+: iso 800
 Neopan 400: iso 640
 Neopan 1600: iso 1600
 APX100/Rollei Retro 100: iso 200
 Acros 100: iso 160, extended 5+5 min. dev.