

Pyro Developer Formulas

Kodak D-1 ABC Pyro

Stock Solution A

Water	750.0 ml
Sodium Bisulfite	9.8 grams
Pyro	60.0 grams
Potassium Bromide	1.1 grams
Water to make	1.0 liter

Solution B

Water	1.0 liter
Sodium sulfite, dessicated	105.0 grams

Solution C

Water	1.0 liter
Sodium carbonate, dessicated	75.0 grams

If monohydrated carbonate is used the amount is 90.0 grams

Note: Sodium bisulfite as specified by Kodak is actually sodium metabisulfite.

For tray development take 1 part of A, B, and C, and add 7 parts of water.

For tank development take 1 part of A, B, and C and add 11 parts water.

The combined developer does not keep and should be mixed fresh for each batch of film.

Agfa-Ansco 45 and Defender 1D are identical to the above.

Kodak D-7 Elon-Pyro Developer

Solution A

Water (at 125F or 52C)	500.0 ml
Elon (Metol)	7.5 grams
Sodium bisulfite	7.5 grams
Pyro	30.0 grams
Potassium bromide	4.2 grams
Water to make	1.0 liter

Solution B

Water	1.0 liter
Sodium sulfite, dessicated	150.0 grams

Solution C

Water	1.0 liter
Sodium carbonate, dessicated	75.0 grams
(or Sodium carbonate, monohydrated)	90.0 grams)

For tray development take 1 part each of A, B, and C and add 8 parts water.

For tray development take 1 part each of A, B, and C and add 13 parts water.

This developer can be used for two or three weeks if the volume is kept up with additions of mixed developer.

Defender 2D is identical to the above formula.

Kodak SD-1 Pyro Stain Developer

For producing a stain image with minimum general stain.

Water (at 125F or 52C)	750.0 ml
Sodium Sulfite, dessicated	1.4 grams
Pyro	2.8 grams
Sodium carbonate, dessicated	5.3 grams
Cold water to make	1.0 liter

If monohydrated carbonate is used the amount is 6.2 grams

Rinse in water and fix in a plain hypo bath.

Kodak D-90 Two Solution Pyro Developer

Stock Solution A

Water	750.0 ml
Sodium sulfite, dessicated	70.0 grams
Sodium bisulfite	17.0 grams
Pyro	20.0 grams
Water to make	1.0 liter

If monohydrated carbonate is used the amount is 87.5 grams

For use take 1 part A, 1 part B, and 2 parts water. Contrast can be varied by adding 1 part to 4 parts water.

Kodak D-84 Special Pyro Tray Developer

For cine enlargements or display transparencies

Stock solution A

Water	750.0 ml
Sodium sulfite, dessicated	180.0 grams
Pyro	30.0 grams
Water to make	1.0 liter

Stock Solution B

Water	1.0 liter
Sodium carbonate, dessicated	120.0 grams
Potassium bromide	3.8 grams

If monohydrated carbonate is used the amount is 140.0 grams

For use take 1 part A, 1 part B, and 4 parts water.

Note: This developer is probably designed to produce little or no image stain.

Kodak D-79 Pyro Tank Developer

For motion picture negative film

Water	750.0 ml
Sodium sulfite, dessicated	25.0 grams
Pyro	2.5 grams
Sodium carbonate, dessicated	5.0 grams
Potassium bromide	0.5 grams
Water to make	1.0 liter

If monohydrated carbonate is used the amount is 5.85 grams.

Use full strength

Kodak D-70 Pyro-Soda Developer

Water (125F or 52C)	750.0 ml
Sodium sulfite, dessicated	7.7 grams
Sodium bisulfite	0.7 grams
Pyro	4.2 grams
Sodium carbonate, dessicated	5.6 grams
Potassium bromide	0.4 grams
Water to make	1.0 liter

If monohydrated carbonate is used the amount is 6.5 grams.

Kodak Long Life Deep Tank Developer for Roll Film D-75

Solution No. 1

Water (about 125F or 52C)	500.0 ml
Metol	3.0 grams

Solution No. 2

Water (about 125F or 52C)	500.0 ml
Sodium sulfite, dessicated	18.0 grams
Sodium bisulfite	36.0 grams

Solution No. 3

Hot water (about 160F or 71C)	500.0 ml
Sodium sulfite, dessicated	18.0 grams
Hydroquinone	12.0 grams
Pyro	3.0 grams

Solution No. 4

Water (about 125F or 52C)	500.0 ml
Sodium carbonate, anhydrous	72.0 grams

Mix each solution separately and add to the tank at once in the order given.

Then add water to make 4.0 liters

Kodak D-75B Long Life Developer for Automatic
Machine Development of Roll film.

Solution No. 1

Water (about 125F or 52C)	4.0 liters
Metol	60.0 grams

Solution No. 2

Water (about 125F or 52C)	4.0 liters
Sodium sulfite, dessicated	180.0 grams
Sodium Bisulfite	360.0 grams

Solution No. 3

Water (about 125F or 52C)	4.0 liters
Sodium sulfite, dessicated	360.0 grams
Hydroquinone	240.0 grams
Pyro	60.0 grams

Solution No. 4

Water (about 125F or 52C)	4.0 liters
Sodium carbonate, dessicated	1440.0 grams

Dissolve chemicals in order given.

Dissolve separately and add to tank in order given. The mixture of the first three solutions should be allowed to cool before adding NO. 4 to avoid effervescence. When all four solutions have been added to the tank add water to make 40.0 liters.

Kodak D-75R Replenisher Solution for D-75 and D-75B

Water (about 125F or 52C)	2.0 liters
Metol	15.0 grams
Sodium Sulfite, dessicated	90.0 grams
Sodium bisulfite	90.0 grams
Hydroquinone	30.0 grams
Sodium carbonate, dessicated	240.0 grams
Water to make	4.0 liters

For D-75 dilute 1 part stock solution with 1 part water and add to tank as required.

For D-75B use without dilution and add to the tank as required.