

# KODAK BROMIDE PAPER

'Kodak' Bromide Papers are suitable in speed for printing with any type of enlarger or contact printer. The hardened emulsion produces a neutral, rich, black image tone with a full scale of densities through all degrees of contrast, over a wide range of developing times.

**Safelight.** A 'Kodak' Safelight 'Wratten' Series OB (lime yellow) with a 25-watt bulb should be used.

**Development.** Any bromide paper developer may be used, but for best results use 'Kodak' Special Developer D.163 (available in powder or solution form), 'Kodak' Universal Developer (available in solution form), or for slightly colder tones with shorter development, 'Velox' Developer (available in powder or solution form).

## KODAK FORMULA D.163 Stock Solution

<i>Metric</i>		<i>Avoirdupois</i>
2.2 grammes . . .	'Elon' . . . . .	80 grains
150 grammes . . .	Sodium sulphite, crystals . . . . .	12 ounces
(75 grammes) . . .	(or anhydrous) . . . . .	(6 ounces)
17 grammes . . .	Hydroquinone . . . . .	1 ounce 160 grains
175 grammes . . .	Sodium carbonate, crystals . . . . .	14 ounces
(65 grammes) . . .	(or anhydrous) . . . . .	(5 ounces 80 grains)
2.8 grammes . . .	Potassium bromide . . . . .	100 grains
1000 cc . . . . .	Water to make . . . . .	80 fl. ounces

Dissolve the chemicals in the order given

## DILUTION AND DEVELOPMENT TIMES

Developer	Dilution of stock solution	Development time at 68°F (20°C)
'Kodak' Special Developer D.163	{ 1 + 3 parts water 1 + 1 part water* 1 + 7 parts water 1 + 1 part water	1½-2 minutes
'Kodak' 'Universal' Developer		1½ minutes
'Velox' Developer		1½-2 minutes
		1 minute

\*For longer solution life

**Fixing.** Rinse in a solution of 'Kodak' Liquid Stop Bath with Indicator or in running water for 10 seconds and fix for 5 minutes at 65°-70°F (18°-21°C) in a fresh solution of either 'Kodak' Acid Fixing Salt with Hardener, or 'Kodak' Acid Fixer Powder, or one made up according to Kodak formula F.54 or F.52. Discard the bath when 10,000 sq. in of paper has been fixed per gallon (or 15,000 sq. cm per litre). For more efficient fixing and washing, use two successive fixing baths. Fix for 3-5 minutes at 65°-70°F (18°-21°C) in the first bath, drain and fix in the second bath for a further 3-5 minutes. When 20,000 sq. in of paper has been fixed per two 1-gallon baths (or 30,000 sq. cm per two 1-litre baths), discard the first bath, replace it with the second bath, and prepare a fresh second bath. Continue this cycle until a maximum of 100,000 sq. in per two 1-gallon baths (or 150,000 sq. cm per two 1-litre baths) has been fixed, when both solutions should be renewed.

**Washing.** Wash single-weight prints in running water at 60°-70°F (16°-21°C) for 30 minutes, or alternatively for 5 minutes in each of 6 changes of water. Double-weight prints require 45 minutes in running water, or 5 minutes in each of 9 changes of water. The use of 'Kodak' Hypo Clearing Agent permits washing time to be reduced considerably.

**Toning.** The black image given by the above developers may be toned to sepia by using 'Kodak' Sepia Toner or a toner made up according to Kodak formula T.52.

**Drying or Glazing.** Dry prints face downwards on absorbent material (e.g. muslin or cheese-cloth). A final brief rinse (about 30 seconds) in diluted Kodak 'Photo-Flo' Solution assists this process and is especially recommended when hot-glazing glossy prints. 'Kodak' Glazing Solution is recommended when cold-glazing on glass, etc.

*Kodak, Wratten, Velox, Elon, and Photo-Flo are trade marks*