The Beers Formula

The is a unique (and caustic) development formula to "print the highlights and develop the shadow areas"

Ansel Adams was a big believer of this method- I think Milton used this to better control the shadow areas without losing highlights on difficult negatives.

Here is a link (pdf file) to an extensive brochure on the use of the Beers' Formula: <u>http://www.photoformulary.com/uploads/02-0120.pdf</u>

Below are some details about Dr. Beers Developer from the book *Photographic Possibilities* by Robert Hirsch

Dr. Beers Variable-Contrast Developer

Dr. Roland Beers variable-contrast developer is a classic two-stock solution paper developer. Stock solution A contains Metol (a soft developer) and stock solution B contains hydroquinone (a contrast developer). Varying the proportions of the stock solutions A and B allows one to alter contrast by between 1/2 and 1½ grades, depending on the paper. The resulting prints typically have good blacks and neutral tones with excellent tonal separation. Stock solutions A and B are mixed at the time of use in varying proportions to yield a progressive range of contrasts, as listed in Table 7.1. Dr. Beers has a developing range of 1½–5 minutes at 68°F (20°C). The low-number solutions can be diluted even further with water for extremely soft effects.

Dr. Beers Variable-Contrast Formula

Dr. Beers stock solution A

Water (125°F/52°C)	24 oz (750 ml)
Metol	120 grains (8 g)
Sodium sulfite (desiccated)	350 grains (23 g)
Sodium carbonate (desiccated)*	300 grains (20 g)
Potassium bromide	16 grains (1.1 g)

Cold water to make 32 oz (1 liter)

Dr. Beers stock solution B

Water (125°F/52°C)	24 oz (750 ml)
Hydroquinone	120 grains (8 g)
Sodium sulfite (desiccated)	350 grains (23 g)
Sodium carbonate (desiccated)*	400 grains (27 g)
Potassium bromide	32 grains (2.2 g)

Cold water to make 32 oz (1 liter)

*The original Dr. Beers used potassium carbonate. Sodium carbonate may be substituted, as it is less expensive and more widely available, and should not produce any observable differences.

Table 7.1 Dr. Beers Variable-Contrast Developer Dilutions

	Contrast								
	Low			Normal			High		
	Sol. 1	Sol. 2	Sol. 3	Sol. 4	Sol. 5	Sol. 6	Sol. 7	Sol. 8	
Parts of A	8	7	6	5	4	3	2	1	
Parts of B	0	1	2	3	4	5	14	15	
Parts of water	8	8	8	8	8	8	0	0	

Sol. = solution.