

Ink Mixing – Eboni MK and Others

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For former darkroom workers or others so inclined, B&W inksets are not difficult to mix. I have routinely used the generic base, below, to dilute Eboni MK for B&W, matte inksets, and Canon Blue and Cyan for the toner I use to neutralize the warm carbon inksets. Because there is no binder in this generic base, inksets made with it are very clog-free. Binders needed for glossy inks are a type of glue that is a major factor in inkjet clogging.

Significantly, the Canon and HP pigments have a coating that is compatible with the generic base with no binders because the HP and Canon pigments have their own coating technology that binds the particles to the glossy papers.

Recommended Generic Base Formula – “C6b”¹

The formula for the generic dilution base that I recommend most highly – called “C6b” – is below. This can also be bought premixed from MIS (no royalties to me, the formula is truly open source and available to all for free).²

When mixed, by weight,³ use the following percentages:

55% distilled water,⁴

34% glycerol,⁵

10% Kodak Photo-Flo, and

1% Edwal LFN.⁶

¹ My first carbon inkset made with this was called “Carbon-6.” Thus the name “C6.” The second version of the base – version “b” – was the best, with all the ingredients being easily available. Thus “C6b” is the top recommendation and what I use across the board now.

² See <https://www.inksupply.com/product-details/pn/PR-C6BBASE-PT.html?printerID=0>

³ If mixed on the basis of volume instead of weight, the most important change is to use only 80% as much glycerol as the “by weight” percentages specify. So, for a “100 ml” blend, use 55 ml H₂O, 27 ml glycerol, 10 ml Photo Flo, and 1 ml LFN. The actual mixed size would be 93 ml. (A c6b user calculated the formula to be as follows if mixing by fluid ounces and rounded off for simplicity: Water: 32 fluid oz; Glycerol: 15 fl oz; Photo Flo: 6 fl oz; Edwal LFN: 0.5 fl oz (1 Tablespoon).)

⁴ NOT just “purified.” Bad water appears to be the main risk here. Use new distilled water from a reputable source.

⁵ Use 99.7% pure. This often is also referred to as “Kosher.” Search will result in active sellers. See, e.g., <http://www.bulkapothecary.com/raw-ingredients/other-ingredients-and-chemicals/glycerin/> or <http://store.acme-hardesty.com/product/1/glycerine>.

⁶ See B&H or Freestyle. The 4 oz. Size is at <http://www.freestylephoto.biz/54151032-Edwal-LFN-Wetting-Agent-4-oz.>

In General

The C6b inkset base is composed of just a few common, readily available, economical, and safe materials. Because the cost of the dilution base is so low, the cost of the dilute inks can be very low even when relatively expensive inks are used in the mix. This is because dilute inks are mostly water.

I have been using c6b for several year and have seen no problems with these inksets that relates to the dilution bases I describe. Do not use the generic base with MIS color pigments or K3 inks. HP and Canon work, as, apparently, does the Epson Eco Tank MK carbon (possibly the least expensive carbon internationally). While the base is matte, I use c6b for my Canon based light blue toner because the Canon pigments are already coated. While the glossy MIS “amber” base reduces bronzing when the toner is used for glossy papers, I use the c6b for more reliability (no clogging).

For more (and older) details on these inksets and user mixing see <http://www.paulroark.com/BW-Info/Ink-Mixing.pdf>