



Another Busted Myth: Lightfastness Barrier Layers

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We've been asked on a number of occasions whether you can improve the performance of a pencil with a poor lightfast rating by covering it with some kind of lightfast barrier layer.

It's certainly a tempting thought, that you could keep using those favorite but fugitive colored pencils that you love, simply by adding a layer of a lightfast pencil on top, or by spraying it with a UV-blocking fixative or varnish. Our answer to that question has always been a wobbly "um, probably not."

Time to find out for sure

Since that's not good enough, last year we decided it was time to find out for sure by running some lightfast tests.

To begin with, we chose four colored pencils rated "fugitive" (i.e., pencils that had scored between 1 and 2) on previous lightfastness tests, and we numbered them 1 to 4. We then made four sets of test strips for each fugitive pencil (for a total of 16 test strips), as follows:

Strip 1 (A) was the bare colored pencil.

Strip 2 (B) was sprayed with Krylon Gallery Series UV Archival Varnish (1377 Satin)

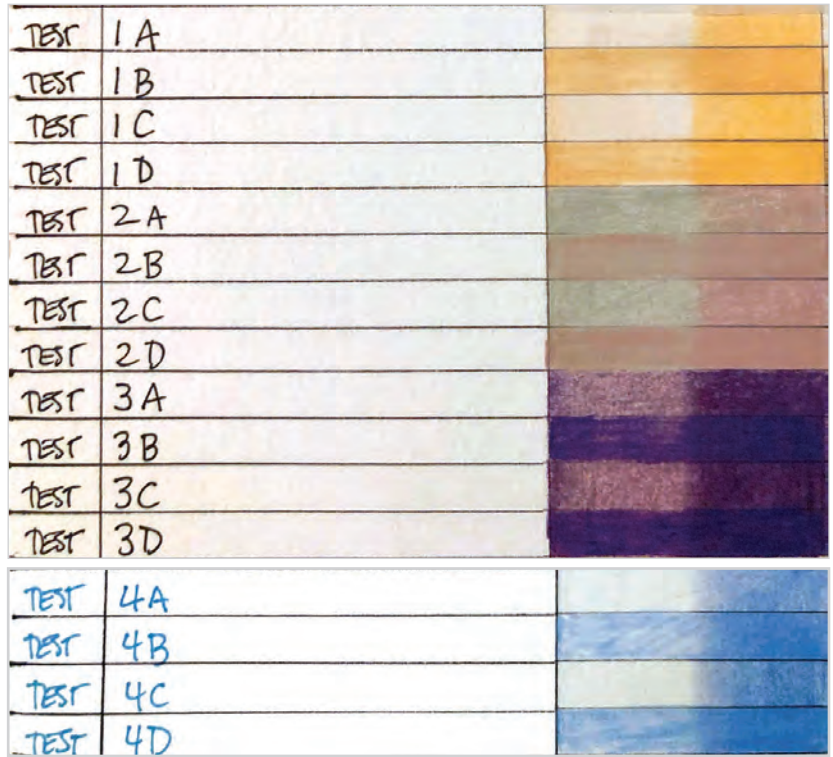
Strip 3 (C) the pencil was covered with a layer of a proven lightfast pencil of a similar color.

Strip 4 (D) we covered the pencil with the same lightfast pencil as in (C) AND then sprayed it with the UV-blocking varnish.

We then placed the boards with the test strips into an outdoor test box and exposed them for 3 months.

Drum roll, please

The results were pretty consistent for all four colored pencils, as you'll see in the photos above. The performance of the fugitive pencil in strip C, where it was covered with only a layer of a lightfast pencil, showed no measurable improvement whatsoever. You can see that again in strip D, where there was no appreciable difference in performance between strips B (varnish alone) and D (varnish plus lightfast pencil), demonstrating pretty conclusively that adding a layer of lightfast pencil on top of a fugitive pencil will not improve that pencil's performance.



Test strips using known fugitive colors were exposed for three months in an outdoor test box, where the left half of the colors had full exposure and the right half remained tightly covered.

There was a measurable improvement, however, in the performance of the fugitive pencil when it was sprayed with the Krylon UV-blocking varnish in strips B and D. In all cases, the rated performance level was raised by an average of 3 points.

Before you rejoice, though, you should note that, even with that improvement, only the dark purple pencil (#3) achieved a fair performance rating, indicating that it is acceptable but still subject to fading or color change. All the other test strips, even with UV-blocking varnish on top, still rated no better than inferior or fugitive.

The bottom line

The bottom line is this: if you simply cannot bring yourself to give up those naughty pencils, we get it. But please remember that:

- Covering a fugitive pencil with a better pencil makes no difference to the outcome.
- Using a UV-blocking varnish along with conservation quality, UV-blocking glazing will improve color retention, but only to a limited extent. (Remember, the results you see in the photos are after *only 3 months*.)
- A fugitive color will fade, period, and some will fade very quickly.

If you are concerned about the longevity of your artwork, then it behooves you to invest in and use colored pencils with excellent lightfastness ratings. Sorry, myth, you're busted.