

# Using Matte, Semi-gloss and Glossy Paper

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There are such a wide variety of papers available for your inkjet printer that selecting a brand and type of paper can be mind boggling. Is brand XYZ paper compatible with your printer and if so, what are the benefits of matte, semi-gloss, and glossy paper types? Let's take a look at some of the pros and cons of using matte, semi-gloss, and glossy paper for your photos.

## Manufacturer Versus Third Party Papers

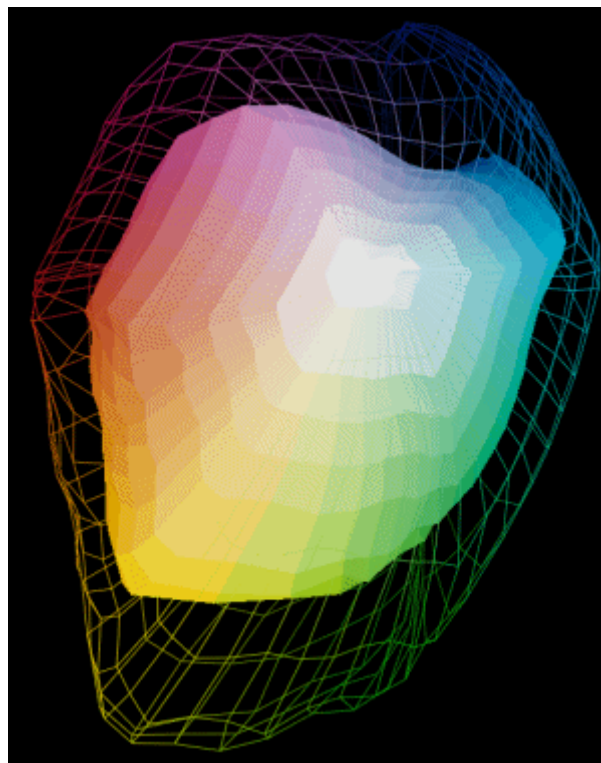
If you use paper made by the same manufacturer as your printer, try to check the paper type selections in your printer driver to be sure the paper is specifically listed. If it is, life is made simpler due to the fact that you know the driver already has a selection compatible with the paper you are using. When it comes to third party papers, things can get a little tricky. You often end up going to the paper manufacturer's web site to see if your printer is listed as "compatible" with specific papers. Even if your printer is listed as compatible with a particular paper, however, be aware that you may need to select specific settings in the print driver that are not immediately obvious like selecting a paper type that doesn't match the paper you are using, adjusting color settings per the paper manufacturer, or even using specific ICC profiles that can be downloaded from the paper manufacturer. Also be warned that just because a printer is listed as "compatible" with a particular paper doesn't mean that it really works *well* with that paper! To be sure, try Googling the type of paper and your model printer to see if others are having success with the combination. I've seen some claims of compatibility that I'd really have to question because in some cases, I'd call the paper incompatible because the paper exhibits significant bronzing, highly visible dot patterns, or other artifacts that I find unacceptable. Suffice it to say that unless you can find others on the web who recommend the combination, stick with paper made by the printer manufacturer to be safe. There are plenty of excellent third party papers out there by various manufacturers, some of which I hold in higher regard than even the manufacturers own paper, but you have to do some research before you can determine if the paper is truly compatible and does not have other issues like longevity problems with certain inks.

## Matte Paper

Matte paper is excellent for displaying photos such as large panoramas that must be displayed "naked" (not behind plastic/glass) in an environment where light reflections can be an issue. Since you don't get any glare at all from matte papers, matte paper is

a good choice for displaying a 4 foot panorama in a camera store under mixed lighting especially where the prints are displayed high on a wall and reflections from overhead lights can be a real issue. Matte papers are generally not as durable as semi-gloss (sometimes called luster) paper or glossy paper as handling of matte prints can sometimes cause abrasion marks similar to running your fingers across a suede or microfiber material. As a result, matte paper is not generally suited for prints that are to be handled in their naked state.

One real issue with matte papers is that they have less dynamic range (contrast) and a smaller gamut than semi-gloss or glossy papers. Some like to say that they have less "apparent" range because that range is dependent on how the light reflects or is scattered off the surface of the paper, but the line between "apparent" and "actual" is a very fine line when it's the light that reaches your eyes that is important. Regardless of the semantics, matte papers will generally have duller colors and less contrast than semi-gloss or glossy papers. This fact even bears out when profiling different paper types as the profiling equipment/tools will find a smaller color gamut and less dynamic range for matte papers and will therefore have to make more compromises when creating the profile. Here's an example of the color gamut of a matte paper and glossy paper profiled under the same conditions, with the same profiling software, for the same printer (Epson 2200):



The wire frame shows the color gamut of the glossy paper and the solid surface shows the color gamut of the matte paper. As you can see, the glossy paper has a significantly larger color gamut, meaning that the same print will appear more vibrant on glossy paper compared to the matte paper. Even though the difference in gamut size can be smaller (or larger) than that depicted above, generally you'll get more vibrant

colors from a glossy print than you will with matte prints. Mounting matte prints behind glass or plastic can compensate for this to some degree, but due to how the ink droplets interact with the paper itself, matte prints will always have a smaller gamut and less contrast than glossy prints.

Next is the issue of resolution. Again, speaking in generalizations (since there are a wide variety of papers that one could compare), glossy papers produce prints with the highest level of "micro detail": that is, detail that can be seen under very close examination of the prints. This is due to the fact that matte papers tend to "soak" up more ink than glossy papers, causing each ink droplet to be a little more spread out and a little less defined on matte paper. The bottom line for matte paper is that it serves an important role but due to color vibrancy and resolution limitations, should be used appropriately and should probably be limited to uses where light reflections and glare are a major concern. Matte papers are also very good when you don't necessarily want that "wet" look but would rather have a softer feel to your photos. They can also be more cost effective when displaying large prints that will not be viewed up close as distant viewing doesn't require fine resolution/detail.

## **Glossy Paper**

Glossy papers generally offer the widest color range and best resolution, but they suffer from glare which can be a problem under certain lighting conditions. As pointed out above, glossy paper is excellent for photos that will be handled in their "naked" state. They may show fingerprints, but they are usually quite durable, to the point where you can easily wipe off smudges or fingerprints without harming the prints. Profiling glossy papers is also often easier as glossy papers offer a "no compromises" quality that truly brings out the best in color and resolution that your printer can offer. They are often not the best choice, however, for scrapbooks or glass mounting as they can sometimes stick to the surface that is mounted against the printed side of the paper! For mounting behind glass or plastic sleeves, semi-gloss may be the best compromise. Also be aware that if you do decide to go with third party papers, glossy papers are the most particular about compatibility with certain printers. That is, it is easier to find third party glossy papers that don't work well with your particular printer or have gas/light fade problems with certain inks.

## **Semi-gloss Paper**

Semi-gloss or "luster" papers offer a good compromise between glare, color range, and durability. With a color range close to that of glossy paper, you can be sure you are getting the full power of your printer while at the same time reducing glare and smudges. Semi-gloss papers may not completely eliminate glare but most of them reduce glare to a point where it is not an issue except under the most extreme lighting conditions and viewing angles. Where glossy used to be my favorite paper type for getting the most color vibrancy and detail from any printer, some of the latest semi-gloss

offerings are quickly changing my mind or at least making it a toss-up between glossy and semi-gloss paper when matte paper is not specifically called for.

## **Other Paper Types**

Of course, we can also choose from canvas, textured, and other "fine art" type papers like "photo rag" papers. These are normally outside the range of what a "typical" user would normally encounter, but suffice it to say that most of the canvas and fine art papers fall (loosely) into the category of "matte paper on steroids" except for the few glossy fine art papers. Canvas and photo rag paper follow the general characteristics of matte papers with some caveats. If you are interested, Google is your friend. A little research goes a long way when determining whether a particular paper is well suited for your model printer. Keep in mind, however, that most photo rag papers soak up even more ink than your typical matte paper and that may force you to increase ink intensity in your print driver to get decent contrast and good blacks. Of course, that will cause a corresponding increase in ink consumption. Personally, I'm not a big fan of most photo rag papers for this reason.

## **Summary**

I often get asked about when it is best to use certain paper types or get questions such as "why use glossy paper at all if it causes glare". I also get asked why it often seems like more work is required when creating ICC profiles for matte papers compared to glossy papers. Hopefully this article has answered a few of those questions and will at least give you a start if you are wondering about the pros and cons of matte, semi-gloss, and glossy papers.