



Techniques

## *Varnishes and Coatings*

Coatings seal a print surface to protect and add a finish. The two primary types of coatings are aqueous and UV. Printers offer flood coating and sometimes spot coating as well.

### **Aqueous Coatings**

Aqueous coating is a water-based coating that seals the sheet and provides protection. It is a thicker coating than varnish, and it tends to smooth out the look of the printed surface of the sheet.

Aqueous coating is recommended for use on uncoated stocks but it is not absolutely necessary. The aqueous coating can guard against any possible scuffing of the ink when there is heavy coverage. Generally, aqueous coating should not be used on weights less than 100 lb. text because the coating is water-based and could cause the sheets to curl.

At lower application levels on uncoated papers, it absorbs into the sheet and it can be difficult to see the effect. However, at higher application levels it is a good sheet sealer and will smooth out non-uniformities.

Aqueous coatings dry quickly. They can be applied over oil-based inks, for they are air permeable when dry allowing ink underneath to dry properly.

Unlike a UV coating or a varnish, an aqueous coating will accept ink jet printing, making it a natural choice for jobs that require printing addresses for mass mailings.

**TIP:**

- Quick drying can cause curling. A recommendation for uncoated stock is a minimum of 100 lb. text and 80 lb. cover.

### **UV Coatings**

UV curable coating provides high gloss with excellent resistance to scuffing. These coatings react to UV light and immediately polymerize into a hard, glossy coating.

Because UV coating can cause slight variations in match colors, consulting with an ink manufacturer or printer will yield the best results.

Varnishes are oil-based inks with no pigment that add gloss to a printed piece. Varnishes are applied like an ink, using a regular printing plate. They are available in three levels of gloss: gloss, satin and dull.



*Making paper fun*

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A varnished area is porous, and therefore offers less protection than a coating. On uncoated paper, the surface is protected when the high and low spots are evened out and the sheet is coated.

Drawbacks of varnishes are that they yellow over time and tend to dry slowly.

Varnishes can be tinted to add subtle color.