

Ask the Technical Experts!

One of the benefits of membership is the technical expertise provided by Printing Industries of America. Our technical experts from the Center for Technology and Research discuss common production problems and issues. The Center for Technology and Research helps members with environmental, health, and safety concerns; consulting and on-site technical assistance; Technical Association of the Graphic Arts; technology training; and simulators.

Q. Can you direct me to an ink calculating formula for the amount of ink needed based on coverage and number of impressions?

A. Due to the differences in paper hold out and absorption, ink strength, and press conditions, no one ink estimating formula is particularly accurate. Any formula needs to be tweaked for the conditions at your location or even for different presses and papers; ink estimating still involves some witchcraft. Most ink manufactures can provide ink-estimating tables or have online calculators. The Printing Industries Press publication "Handbook of Graphic Arts Equations" contains ink-estimating formulas. The book includes a link to download PC/MAC software that has all the equations from the book in a desktop calculator.

https://system.printing.org/index.php?dispatch=products2.view&product_id=1045

Q. Are there any components of spray powder that might be considered hazardous or injurious to health?

A. Spray powder is composed of food starches, but some spray powder can contain unsafe ingredients such as talc, clays, calcium carbonate, and silicone. If you are concerned about spray powder's health effects, use a food grade spray powder. Spray powder should not be allowed to accumulate in thick layers in the pressroom. Spray powder particles in the air at high concentrations can cause explosions and fires and are regulated by OSHA.

Q. Does California's Proposition 65 regulation impact me if I am printing in another state?

A. Only if you are shipping products for direct distribution or to clients that will distribute them in California. In that case, the warning requirements that took effect at the end of August apply to the products if they contain a regulated chemical above the "safe harbor" level. There are over 800 chemicals that are recognized as either carcinogenic or reproductive hazards. If your products contain any of those chemicals that could result in exposure above the "safe harbor" level, then the revised regulation requires specific language and format for the warning label that

must appear on the product. Not all chemicals have a "safe harbor" threshold. If your product doesn't contain those chemicals, your clients may ask you for a document verifying compliance. You can read more at our [Prop 65 webpage](#).

Printing Industries Resources:

Offering unbiased and confidential results, Printing Industries of America provides a range of testing and laboratory services to help solve printing-related problems. For more information, please contact Jim Workman at 800-910-4283, ext. 710 (direct 412-259-1710), visit www.printing.org/labservices or email labservices@printing.org or jworkman@printing.org.
