Ink Mixing Software

Ink Formulation 4.0

...the total solution for all your ink formulation needs.

GretagMacbeth™
The Business of Color Perfection
Formulate inks with speed and ease
When printers need special colors, delays in getting the right ink on press can cost them precious time, customer satisfaction, even missed deadlines. Now GretagMacbeth’s industry-leading Ink Formulation software, Version 4.0, can solve that problem more quickly and easily than ever before. With its new intuitive user interface, network database, and Internet communications, ink suppliers and printers can efficiently share color data and speed the formulation process.

As easy as point, click, and mix
Our improved user interface helps guide you through the process of formulating inks. Colorants can be grouped logically by application or specific needs (e.g., FDA approved colorants for food packaging) for rapid selection and flexible graphical displays help you evaluate and adjust proposed formulas.

A proven recipe for ink formulation success
A sophisticated multi-channel math engine rapidly computes the optimal recipe based on the printing process, ink, illumination, pigment pricing, number of components, and printing materials to be used. Advanced algorithms improve results, especially in highly opaque applications, or when using high-absorption substrates or highly concentrated inks.

Less waste, more profits
When you throw away leftover ink, you literally throw money down the drain. With Ink Formulation Version 4.0, you can rework leftover inks into new formulations. The result: less inventory and waste, lower disposal costs and a rapid return on your Ink Formulation software investment.

Communicate color with the speed of the Internet
Color databases and recipes can easily be sent via e-mail. A special e-Recipe function enables formulation and proofing of colors to be done from a central location. Printers e-mail the desired color, opacity, light fastness, and substrate to the formulator, who creates the mixture and quickly e-mails a proven recipe back to the printer.
At GretagMacbeth, we recognize that a one-size-fits-all solution can mean extra expense and unnecessary complexity. With Ink Formulation Version 4.0 modular components you can acquire the capabilities you need now, at a price you can afford. Then add modules as your requirements change later.

- **Core Module.** Everything you need for fast, accurate calculation and retrieval of ink formulas.
- **Opacity Module.** Optimizes opaque and transparent ink recipes to achieve the desired opacity, with fine adjustment of pigment scattering.
- **Viscosity Module.** Achieves the desired viscosity for liquid inks through accurate proportioning of solvents.
- **Balancing and Dispensing Module.** Controls a balance or interfaces with a dispensing system for automated color mixing.
- **Basic Material Module.** Breaks down printing inks into their basic components such as pigments, binders, additives, and solvents.
- **E-Recipe Module.** Communicates color requirements and ink formulas over the Internet between the printer who specifies the color and the ink manufacturer who calculates the formula.

**Easy instructions customized for your application**

We’ve customized the user interface for each application, using terms specific to that particular printing process. In screen printing, for instance, the software specifies mesh rather than ink film thickness. Using familiar terms reduces the learning curve, improves productivity and helps you gain a return on your investment more quickly.

**A total system for accurate ink mixing, from the lab to the kitchen**

From the smallest printer's kitchen to the most sophisticated ink manufacturer's lab, Ink Formulation Version 4.0 is the software of choice for fast, accurate recipe creation, storage, approval, and retrieval. Together with GretagMacbeth Color Quality software, you can generate reports documenting that the ink you used for the job is an accurate match with the color specified by your client.

**A modular approach that fits your business...and your budget**

Ideal for both ink manufacturers and printers

Choose the level of system that best matches the amount of control you need over the formulation process:

- **Ink Formulation Full System.** You get the Core Module, any other modules you select, plus the ability to create, store, and modify a colorant database. This allows you to build and maintain a complete colorant database featuring all the inks you use.
- **Ink Formulation Satellite System.** Formulate custom inks without creating and maintaining a colorant database. You can import and work with colorant databases supplied by preferred ink manufacturers.
- **Formula Search.** This low-cost version lets you quickly search for formulas that match your specified color. Import formula databases from the ink manufacturer, or enter formulas individually. Stored formulas are sorted by color deviation from the target.
Features at a glance

- **Spectral-based readings** - Calculates spectral as well as densitometric values for CMYK and spot colors.
- **Assortment editor** - Reduces the work required to build the database; fewer mixtures are needed to teach the system.
- **Logical grouping of colorants** - Groups assortments in logical set of inks.
- **Black and white mixtures** - Allows colorant samples to be entered with mixtures of black and white.
- **Palette formulas** - Utilizes existing recipes to supply you with even better first formulas and faster results.
- **Recipe editor** - Speeds editing of recipes with simplified listing and selection of the components and quantities.
- **e-Recipe** - Sends desired colors to a central system where they get mixed and proven.
- **Weight-volume recipe output** - Displays recipe component quantities by weight or volume.
- **Broad hardware compatibility** - Supports a wide range of measurement devices.
- **User administrator** - Permits password-protected levels of access for each user to be set as they are logged into the system.
- **Single and floating licenses** - Gives users flexibility in selecting which workstations will run the ink formulation software.
- **Common structured database** - Stores recipes, assortments, and colorants in a central database available to all users in the network. Recipes can be sorted in different folders according to individual needs.
- **32-bit technology** - Software works with the latest operating systems for better performance.
- **ICC profile support** - Displays color patches accurately based on ICC standards.

Supported measurement devices

- GretagMacbeth SpectroEye®
- GretagMacbeth Spectrolino™
- GretagMacbeth SPM Series
- GretagMacbeth ColorEye® XTH
- GretagMacbeth ColorEye® 2180UV
- GretagMacbeth ColorEye® 3100
- GretagMacbeth ColorEye® 7000A

Please contact GretagMacbeth for a current list of supported third party measurement devices

System requirements

- 266MHz Pentium® II PC or higher
- Windows® 95, 98, 2000 or NT®
- 64 M B RAM
- 20M B of available hard-disk space
- Screen resolution of 1024 x 768

Let our color experts solve your toughest ink challenges

GretagMacbeth offers the printing industry’s most complete line of solutions for color measurement, simulation, and communication – from instrumentation and software to total package solutions. Our industry-leading technology is backed by a team of applications engineers located at GretagMacbeth offices throughout the world...printing color specialists who understand your application and can help ensure that the color your client wants is the color they get.