

# Color Formulation Software

An intelligent solution for formulating paint, plastics, or textiles. This package enables quick, accurate color analysis and the capability to optimize every formula for cost and color accuracy. Available in four levels for specific formulation requirements.



# **Color iMatch Advantages**

#### **Cut Turnaround Time In Half**

- Color iMatch is a multi-flux-based program yielding one-hit matches nearly every time at all levels of opacity.
- The system automatically determines the best formula for your application based on the parameters you select, such as color difference, metamerism, lowest cost or number of colorants in a formula.

## **Reduces Color Formulation Costs with Spectral Matching**

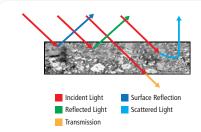
- Most traditional systems assume loading to opacity and this can increase formula costs by adding unnecessary pigments.
- Color iMatch automatically determines the appropriate scattering and absorption characteristics so that the most costeffective amount of pigment is added to achieve accurate color at any opacity level.

#### **Reduce Database Sample Preparation Time**

- Color iMatch saves considerable set-up time because it requires only one database sample set.
- This unique database manages both color and opacity.

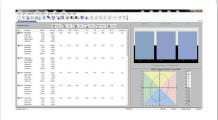
## **Boost Productivity with Formula Output Options**

- Select from a wide variety of formula output units to suit your application needs.
- The system automatically converts volumetric or gravimetric output units and delivers time-saving production ready formulas.



The match engine within Color iMatch is based on a physical model that more accurately characterizes the behavior of light moving through a pigment layer:

- The Two-Constant model describes the path of light in an opaque layer, considering only reflection and absorption
- Lambert-Beer theory is used for transmittance calculations for very transparent samples and describes the path of light through a transparent layer, considering only transmission and absorption
- Multi-Flux model fully characterizes the complex light paths in all kinds of layers and materials, considering transmission, absorption, and both surface and inner reflection



Color iMatch's advanced Multi-Flux match engine reduces formulation costs:

- Traditional color matching systems assume loading to opacity
- This can increase formula costs by adding unnecessary pigments
- A Multi-Flux based matching system automatically determines the appropriate scattering and absorption characteristics so that the most cost-effective amount of pigment is added to achieve accurate color at any opacity level
- Multi-Flux calculates the specific loading level necessary to achieve whatever opacity or transmission level a user requires at a given thickness



In Color iMatch, basic pigment properties are calculated using absolute units:

- Because pigment properties are calculated in absolute units, the way they are applied in the matching algorithm adds versatility to the color matching system and provides more accurate opacity and pigment loading predictions
- The same database can be used for samples at all levels of opacity; transparent, translucent, and opaque and the quality of the predicted recipes will be the same for all degrees of opacity
- It is not necessary to characterize the pigment behavior in all mediums, multiple resin systems [different bases, extenders, clears, etc.] can be calibrated into a single database

## **Increase Operator Efficiency with Unprecedented Desktop Flexibility**

- A simple user interface makes it very easy to operate this powerful program.
- Workflow prompts guide you through the measurement process for greater speed and accuracy.
- Customizable toolbars for formulation, correction and waste simplify navigation.
- Multiple keystrokes and scrolling are eliminated with formula screens that show all the information needed to quickly analyze match results.

#### **Increase Control and Profitability with Economical Satellite Systems**

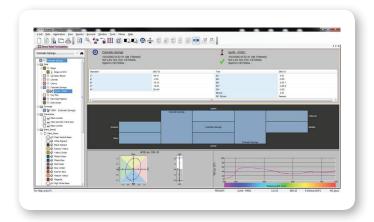
- Provide added value to your business associates with Color iMatch Satellite software.
- Your branches and customers will be able to calculate and correct color formulations in an accurate and affordable way, achieving the same high quality color formulation results that Color iMatch gives you.
- Since you will be controlling the database, everyone will be speaking the same color language.

#### Increase Productivity with Built-In Color iQC® Quality Control

- Save time and reduce waste with Color iQC color quality control software included within Color iMatch.
- Advantages of the Color iQC platform include:
  - Configurability
  - Connectivity
  - Color Exchange, Import, and Export
  - Digital Signatures and Traceability
  - Measurement Modes and Templates
  - Multiple Database Storage and Retrieval
  - Image Capture and Association

#### Color iMatch delivers...

- Payback in as little as three months.
- The highest level of first-hit matching with sophisticated algorithms, wide range of color utilities, and flexible interface.
- Streamlined and integrated workflow for faster decision making.
- Quick and cost-effective color turnaround in markets where sales are driven by new and different palettes.



	Color iMatch			
Features	Basic	Professional	Satellite	Contractor
Job Driven Workflows	•	•	•	•
Intelligent Customization	•	•	•	
Connectivity: Import / Export Capabilities	Limited	•	•	Limited
Data Management	•	•	•	•
Online Training	•	•	•	•
NetProfiler Enabled	•	•	•	•
Traceability / Automatic Associations	•	•	•	•
Textured On-Screen Color		•	•	
Image Capture / Association		•	•	
Dynamic Image Viewer		•	•	
Automatic [Intelligent] Tolerancing		•	•	
Networkable Database	•	•	•	•
Design System Links using CxF		•	•	
User Defined Procedures		•	•	
Visual Representation of Tolerances		•	•	
Interactive Plots and Graphs		•	•	
Remote File Output		•	•	
Integrated Submit and Tagging		•	•	
Context Sensitive Help	•	•	•	•
Password Protect Key Functions	•	•	•	•
Dynamic Database Viewer / User Defined Hierarchy		•	•	
Palette Programs, Color Programs, V endor Management		•	•	
eMail / FTP Support for Managing Submissions		•	•	
Cross Trial Color Differences		•	•	
Data Output to XML, Style Sheets, Direct-to-Database		•	•	
Configurable HTML View using XML Style Sheets		•	•	
Color Coded Tags and Labels		•	•	
Snap to Color		•	•	

# X-Rite: Your source for accurate color. On time. Every time.

X-Rite is a world leader in providing global color control solutions for manufacturing and quality management requirements.

We lead the industry in offering service options to ensure uninterrupted performance of all X-Rite products. Training and educational resources are available globally and online for both new and experienced users to optimize their color measurement capabilities.

Visit xrite.com for more information about X-Rite products. X-Rite customers worldwide may also call the Applications Support team at CASupport@xrite.com or Customer Service at 800-248-9748.

F4	Color iMatch			
Features	Basic	Professional	Satellite	Contractor
Superior Color Matching: Multi-Flux, Single Constant	•	•	•	•
Colorant Tags and Rules		•	•	
Extended Tolerancing (Indices)	•	•	•	
Dynamic Averaging	•	•	•	
Filters by Tag or Date		•	•	
Automatic Tag Prompts		•	•	
Remote Job Support		•	•	
Measurement Modes	•	•	•	•
Tristimulus Matching	•	•	•	•
Formula Search	•	•	•	•
Search and Correct	•	•	•	•
Multiple Target Matching	•	•	•	•
Gloss Compensation	•	•	•	•
Lightness Adjustment	•	•	•	•
Manual Formulation and Correction	•	•	•	•
Thickness / Opacity Control	•	•	•	•
User Definable Formula Output	•	•	•	•
Palette Finder	•	•	•	•
Configurable Recipe Scoring and Formula Sorting	•	•	•	•
Quick Corrections	•	•	•	•
Integrated Quality Control		•	•	
Colorant Calibration or Primary Evaluation	•	•		
Alternate Colorants	•	•	•	
Searchable Formula Codes				

General System Requirements for Industrial Stand-Alone Software				
Item	Recommended	Minimum		
Processor	Intel Core 2 duo, AMD Athlon II or higher	Pentium IV		
CPU Speed	2 Ghz or higher	1 Ghz		
RAM	2 GB or higher	1 GB		
Operating System	Windows® 7 [both 32 and 64 bit versions], XP Professional SP3	Windows® XP Professional SP3		
Hard Disk	5 GB free space on system disk	1 GB free space on system disk 2GB free space on data disk		
CD	24X speed or faster	4X speed		
Video Adapter	XGA [1024 x 768] 32 bit True ColorSupport for OpenGL	SVGA [1024 x 768]16 bit High Color Support for OpenGL		
Com Ports	1 Serial or USB port for each connected instrument	1 USB port		
Internet / E-Mail	Recommended for data transfers, software updates, and technical support	Not required		

