

Lovibond® Colour Measurement

Tintometer® Group



Colorant Name	% Weight	Pounds	% Volume	Gallons
Best Match				
RED	0.3445 %	0.345	0.3445 %	0.0
LOW	0.8028 %	0.803	0.8028 %	0.0
GREEN	7.0214 %	7.021	7.0214 %	0.8
	91.8312 %	91.831	91.8312 %	11.0
	100.0000 %	100.000	100.0000 %	11.9
		100.000		11.9

Trial 1: Match 16 of Standard

Colorant File: Plastics

Colorant Name

% Weight

Pounds

% Volume

Gallons

Best Match

RED

LOW

GREEN

100504.80

0.00

A

Trial 1

0.05

0.01

0.12

-0.02

0.11

OnColor™ Match

Colour Quality Control Software

Versatile, easy-to-use OnColor™ Match software quickly and accurately calculates and predicts colour match formulas in a wide variety of solid, liquid, gel and film applications, including coatings, plastics, textiles, inks, foods, beverages, fragrances, toiletries, cosmetics, appliances, furnishings, building materials and much more. It is engineered to help you achieve the highest level of accurate 'first-shot' colour matches and to minimise production corrections. It combines intuitive features, which make operators quickly comfortable and productive, with advanced, integrated features that optimise formulation, correction and quality inspection operations.

Teamed with either a portable or benchtop colour measurement spectrophotometer, OnColor™ Match software can give you a powerful competitive ability to increase overall production and enhance responsiveness to today's 'just-in-time' customer demands.

OnColor™ Match

Speed colour matching

OnColor™ Match software helps speed customer orders by reducing laboratory trials and minimising formula adjustments by 50% or more compared to traditional methods. It replaces time-consuming trial and error with high-speed computer colour matching. From a stored database of colourants it calculates in seconds the best match, least cost, least metameric formulas.

All possible combinations of colourants

Choose from a colourant group, or select from the palette; options that further increase matching speed.

Automatic or manual colour matching

Measure a target colour in automatic mode and let the software generate the match formula for you. Or, input a trial formula manually and let the software quickly compute its spectral curve and output its probable colour difference measurements. Either way, almost instantly you can compare your predicted formula with the target colour you are attempting to match.

New matches from previously proven formulas

With the OnColor™ Match formula storage option you can quickly access a proven formula and with just minor adjustments match a new target colour in minimum time.

Accurate matches from solid or liquid samples or materials with UV content

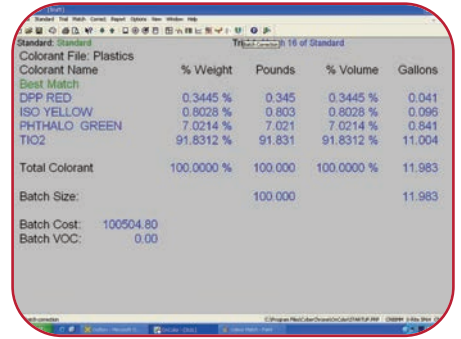
Special features and program routines let you accurately measure all types of solid samples or liquid dyes and adjust for whiteners and brighteners with UV components.

New matches from excess or recycled materials

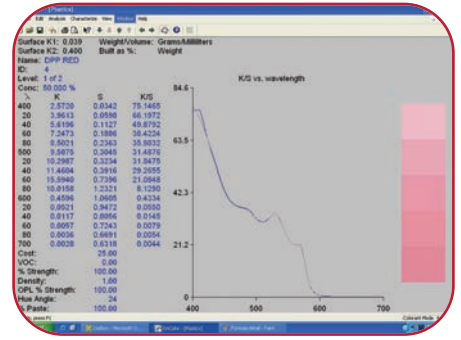
OnColor™ Match software can incorporate unused print pastes in new colour recipes to help you reduce waste and associated disposal costs.



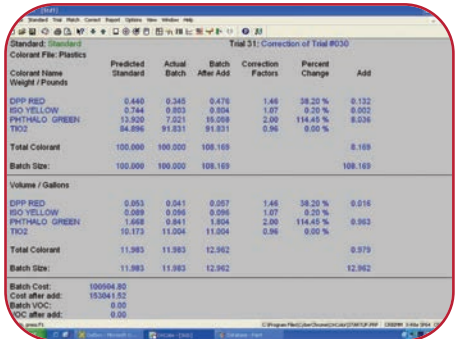
1. Colour match



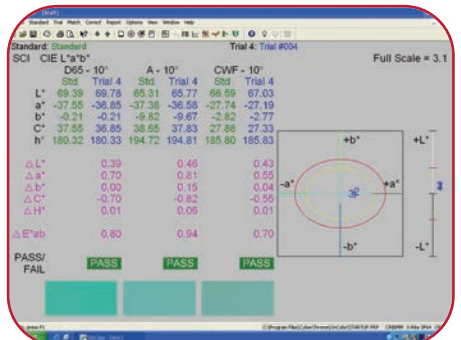
2. Formula detail



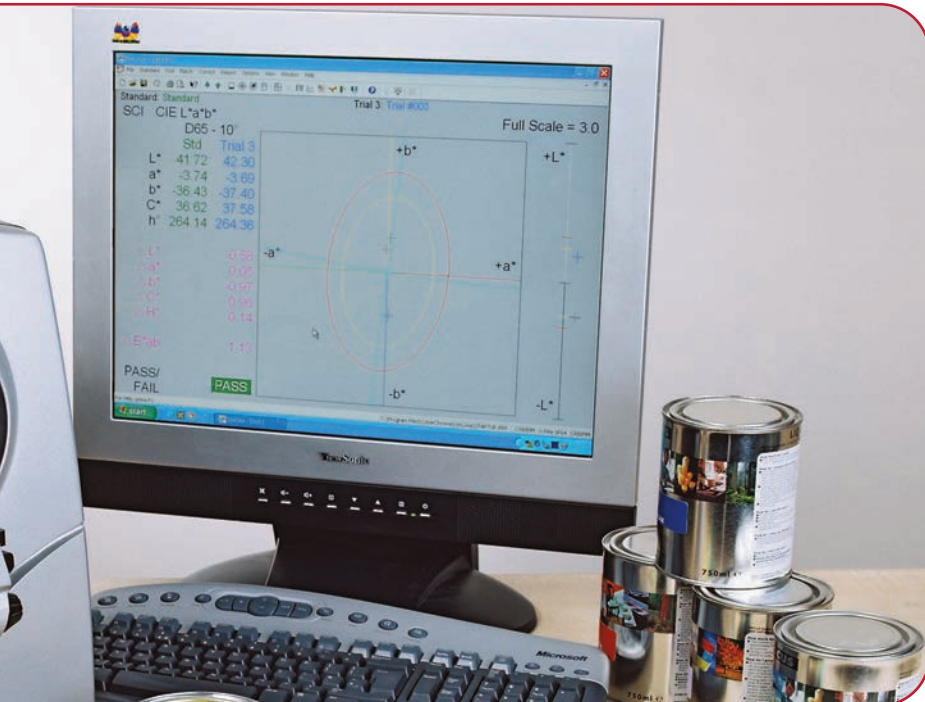
3. Database



4. Formula add/adjust



5. Pass/fail QC



Cut Production Adjustments

In the real world colour-matching involving dyes and pigments, machine-to-machine variations, process anomalies and human errors, such as misweighs and sample preparation errors, often make production adjustments unavoidable — even when your laboratory match is perfectly correct. OnColor™ Match software gives you a range of options which help you minimise the need for adjustments.

Automatic add OnColor™ Match software automatically calculates any additional colourant necessary to bring your production back on target.

Optimise Add Use this option to correct a batch with just one colourant. The software calculates the optimum add of this colourant.

Manual add You supply the adjustment you think best for a formula, and OnColor™ Match software will simulate and predict the effects of your adjustment.

Batch size variation OnColor™ Match software can calculate accurate adjustments a number of ways; for example, when you know the weight or volume in a batch, or when the batch size is software generated, or even when true batch amounts are not known.

Reduce adds or change correction factors OnColor™ Match software is versatile on the job. For example, when the strength of a dye or pigment in a production batch is less than or greater than predicted, it can adjust correction factors to accommodate the actual performance of the colourant.



Gain Performance and Flexibility

OnColor™ Match software gives you the speed, accuracy and flexibility you need to respond to changing customer needs, to operate more profitably and to build your business.

Faster Estimating Detailed production costing gives you faster, more accurate estimating.

Shorter lead times Streamlined colour-matching in the lab and fewer colour issues in production help you meet today's ever-tighter customer deadlines.

More confident matching High speed combinatorial matching evaluates and eliminates hundreds of possibilities to give you the best possible matches no matter how difficult the colour.

Wider colour range Faster laboratory and production throughput, combined with

OnColor™ Match software's extensive colourant database capabilities, enable you to reduce the number of colourants in your inventory.

More consistent colour quality Batch-to-batch, run-to-run, order-to-order, OnColor™ Match software helps you produce accurate colour consistently and document your colour quality for your customers . . . increasing both repeat order levels and reducing your need to submit rebids every time.

Expandable, upgradable colour control With OnColor™ Match software you can decide just what level best suits various points in your operation. From an OnColor™ Match Silver System with match and correct capabilities to an OnColor™ Match Gold System with comprehensive formulation, correction, quality control and SPC/SQA capabilities.

OnColor™ Match Silver Software provides all functions needed to perform colour matching, batch correction and waste work-off. It also provides the shade library and formula storage module for search of the closest shade, for search and correct to a new target colour, and for retrieval of formulas. Silver level software is ideal for satellite plants and laboratory operations where the colourant database is supplied by another operation.

OnColor™ Match Gold Software provides all of the above plus the complete colour characterisation module. The colourant characterisation module enables you to generate and maintain the colourant database used by the matching and correction modules. Gold level software is ideal for central colour laboratories which generate the complete data files of raw materials, colourants, additives and other recipe ingredients used in colour matching and correction applications in all operations.

Both levels seamlessly integrate all of the quality control functions of OnColor™ Premium colour quality control software. OnColor™ Premium software features user-defined screens, automatic elliptical tolerancing, pass/fail comparative inspections, standard database capabilities, batch history data, custom report generation, user-defined macros and many other advanced quality inspection operations. Three password levels control access to menu features, setups, colour standards, tolerances and databases.

Technical Data

Legend: ✓ feature included

SILVER GOLD

	SILVER	GOLD
Colour Matching/Formulation Functions		
Automatic combinatorial matching using all possible combinations of colourants	✓	✓
Matches calculated using up to 6 colourants per match	✓	✓
Sort/select matches by weighted ΔE , cost, or metamerism	✓	✓
Output options: match screen display; dual units of weight, volume, dry liquid or paste; choice of 15 units of measure; choice of pre-set number of matches; match to 3 illuminants or primary only; display spectral curves and ΔE 's for all matches	✓	✓
Waste work-off via fixed % or fixed amount in new matches	✓	✓
Manual matching; formula input with synthesis of spectral curve and ΔE 's relative to standards	✓	✓
Colourant selection by colourant group, user-specified, or software specified; colourant exclusion rules	✓	✓
User definable colourant groupings for specific applications	✓	✓
Gloss compensation for matching to different gloss levels	✓	✓
Batch Correction Functions		
Automatic calculation of minimum add to match standard	✓	✓
Option displays: weight or volume units; dry, paste or dispersion; predicted standard and batch % correction factors and % change; cost	✓	✓
Manual add with display of ΔE and spectral curves; optimise add	✓	✓
Correlation of correction factors from batch information for computation of adds	✓	✓
Shade Library and Formula File Functions		
Batch history data storage/management for unlimited number of samples per file	✓	✓
Shade Library with formula storage	✓	✓
Store unlimited number of colour standards with tolerances and optional formulas	✓	✓
Search library for closest colour by maximum ΔE and total number of matches	✓	✓
Recall a standard and/or trials from library; filter the database according to selected criteria	✓	✓
Search and correct the closest colour	✓	✓
Recall standard and its formula for production correction	✓	✓
Files are ODBC compatible (can be read in Access and other ODBC database for further manipulation and reporting)	✓	✓
Colourant Characterisation Functions		
Characterisations of dyes, colourants, additives, substrates and/or recycle materials		✓
Calculation of optical constants: K, S, K/S, or A		✓
Multiple white letdown for both single and two constant applications		✓
Choice of application-specific calibration techniques: opaque or transparent		✓
Error-analysis on back-prediction for trouble shooting database		✓
Calculation of Saunderson coefficients for gloss correction; entry of colourant rules table		✓
Storage and edit of complete colourant name and data including comprehensive physical and optical properties		✓
Colour Parameters		
Illuminants: A, C, D65, D50, D55, D75, F2, F6, F7, F8, F10, F11, U30, U50	✓	✓
CIE standard observers: 2° and 10°	✓	✓
Colour space/colour difference scales: CIE L*a*b*; CIE L*C*h; CMC; CIE L*u*v*; HUNTER Lab; CIE 94; XYZ/Yxy, FMC2, CIE 2000, GE-PQS, Audi, DIN99	✓	✓
Spectral data at 10nm or 20nm intervals with spectral graphs for target and unlimited samples	✓	✓
Munsell Notations; 43 industry-specific indices; 21 delta indices	✓	✓
555 shade sorting	✓	✓
Colour Quality Inspection Functions		
OnColor™ Match software is supplied complete with full OnColor™ Premium colour quality inspection software, including all needed modules for colour space selections, illuminants; pass/fail inspections; report generation; and data export to SPC/SQA and spreadsheet compatible files	✓	✓
General Functions/Requirements		
Microsoft® Windows® 2000 or XP required	✓	✓
Custom report generator and user display screens	✓	✓
On-screen video simulation of colour for standard and samples in three illuminants	✓	✓
Macro generator for user-created macros; save and recall of unlimited macros	✓	✓
On-line instruction manual; built-in Colour Science Tutorial	✓	✓
User-definable workspaces; 3 levels of password protection	✓	✓
Export to spreadsheet compatible files	✓	✓
Upload and download to portable spectrophotometers	✓	✓
Data import/export with OnColor™ Lite and OnColor™ Premium	✓	✓
E-mail of colour data via Microsoft® Mail	✓	✓

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