

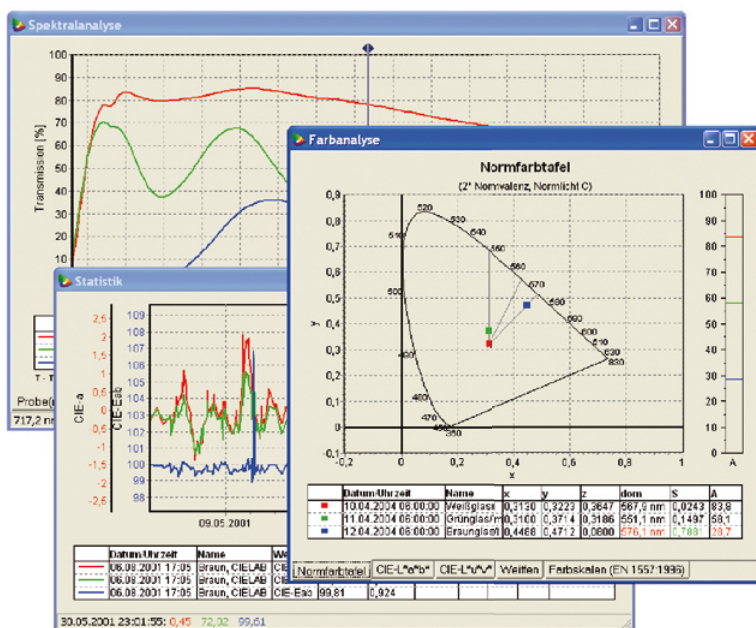


PRISMA

Quality is visible

Optical spectrum analysis and color measurement for glass industry

The color can be of decisive significance for the market success of a product. Above all when natural or recycled raw materials with fluctuating chemical composition are used, the constant and objective control of the color effect is an essential precondition for unchanging quality. With the PRISMA software package and a PC-controlled spectral photometer, the spectral transmission properties of glasses can be determined accurately, and the Helmholtz and CIELAB color values can be calculated from them and displayed.



Your Benefits

Optimization of quality by stabilization of the glass color

Acceleration of color changes by process-oriented measurement

Faster development of new glass types by prediction of the glass color

Modern and convenient Windows® user interface

Import and export functions for easy data exchange





PRISMA

Features and versions

Integrated database for comfortable management of all parameters and measuring results

Direct control of spectral photometers from various vendors

Measurement of the spectral transmittance and reflectance properties in air or in immersion solution

Graphical display of an arbitrary number of transmittance and reflectance spectra

Standardization of transmittance spectra for any layer thickness

Measurement and compensation for wavelength-dependent boundary reflectance

Measurement and compensation for the absorption of immersion solutions

Management of reference standards and calculation of deviations

Calculation of T_e , R_e , T_v , R_v , T_{uv} and R_a according to EN 410:1998 and ISO 9050:2003

Determination of the tristimulus values and chromaticity coordinates according to the spectral method

Color determination according to Helmholtz and presentation in chromaticity diagram

CIELAB and CIELUV color determination and presentation in Lab and Luv color space

Conversion to standard illuminants A, C or D65 and 2° or 10° colorimetric observer

Automated measurement procedures and statistical outlier checking ¹⁾

Graphical trend analysis and monitoring of tolerances ¹⁾

Data export of any parameter as file or via the clipboard ¹⁾

Creation and automatic output of user-defined reports ¹⁾

Evaluation and graphical presentation of the inspection ability of amber glass ²⁾

Determination of the redox state (Fe^{2+}/Fe^{3+} ratio according to Bamford/Hudson) ²⁾

Determination of concentration of important coloring ions in glass ³⁾

Calculation of the color effect of packaging glass based on the chemical composition ³⁾

¹⁾ Prof./Glass/Expert ²⁾ Glass/Expert ³⁾ Expert edition only

Custom adaptations and special versions are possible on request. No responsibility is taken for the correctness of the information. All information is subject to change without prior notice.

Product website: www.ilis.de/en/prisma.html
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