HOHENSTEIN

Colourimetric Testing and Whiteness Assessment

Objective

The aim is to determine colourimetric values and colour difference in an almost uniform CIELab Colour Space as well as to measure the degree of whiteness quality of white, fluorescent resp. non-fluorescent samples.

The test is well-suited for

- Textiles of all types: Corporate Design, to-be-reprocessed textiles, clothing, etc.
- Planar synthetics, paper and painted surfaces
- Compacted powders and movable pirn
- textiles in combination/interaction with liquid or viscose products

Your advantages as a client

- Increased product and quality assurance
- Certainty about colour consistency
- Assessment of whitness samples in reference to the specification

Description

The spectral reflection of the samples will be determined by spectral photometers with varying measurement geometries (d/8, d/0, 45/0) and different standard illuminants. Depending upon the task the spectral data will be used to calculate the different criteria of colourimetry and whitness quality. equations. Providing a master sample or master values, the differences of the comparison sample can be determined on base of various formular (Pass/Fail systems e. g. CIE_{76}, CMC, DIN99, CIE2000).

The standard tests are:

- Determination of the coordinates acc. to DIN 5033 and DIN EN ISO 11664-4
- Determination of CIELAB colour difference acc. to DIN EN ISO 11664-4 and DIN EN ISO 105-J03
- Visual and colourimetric acceptance of colour differences for coloured resp. white samples (Pass/Fail-method)
- Determination of chromaticity and illumination density factor of background material acc. to DIN EN ISO 20471, DIN EN 1150 and DIN 58124
- Determination of degree of whiteness, tint value and brightness value acc. to Ganz/Griesser and CIE acc. to ISO 11475 as well as other formulars
- Determination of the basic white value (Y420 value) acc. to RAL-GZ 992-994
- Investigation of causes of differences in degree of whiteness of white samples using a Polaris measurement system
- Determination of ISO brightness acc. to ISO 2470
- Determination of opacity acc. to DIN 53146 or view tightness acc. to Hohenstein method
- Other tests on request

Your advantages as a client

- Increased product and quality assurance
- Certainty about colour consistency
- Assessment of whitness samples in reference to the specification

Requirements for test samples

General information:

- Samples should be wrinkle free and free of foreign matter and substances

Amount of material:

- Test sample in DIN A4 format (approx. 20 cm x 30 cm)

Duration of testing:

- 10 working days after receipt of order and samples