

Opaqueness and Opacity

Objective

Determination and evaluation of light transmittance, and thus the opaque properties, of textiles and similar materials. There are two different methods – opacity and opaqueness.



Your benefit as customer

- Characterization of the product
- Reduced number of complaints due to proven quality
- Product optimisation while development
- Surveillance of compliance with customer's specifications

The tests are suited for

- Conventional clothing textiles such as blouses, shirts, t-shirts, swimwear, trousers
- Clothing which is meant to be transparent
- Sportswear
- Pale workwear, professional and service clothing
- Uniforms
- Technical textiles
- Paper and cardboard

Description

Opacity

The transmittance of visible light in the range of wavelengths between 360 nm and 700 nm can be determined according to DIN 53146 Determination of opacity or DIN 53147 Determination of transparency, modified for textile tests. The result shows a percental opacity. An evaluation is not included. Tests are only performed in new and dry condition.

Opaqueness

With the test according to Hohenstein method you get a characterisation of the opaque properties of clothing textiles (opaqueness), based on a research study.

In the test, the unstretched textile is measured with defined skin types (pale and dark) and defined contrasting colours (black, white and red). The different combinations of sample and contrasting colours are compared to both defined skin types.

You can choose between a 3-stage qualitative evaluation based on the results of the research study or a simple pass/fail evaluation based on client's indication.

Tests can be performed in dry or dry and wet condition, depending on function or scope of the textile.

In addition, the sample can be tested in other conditions, such as stretched, washed or similar. Please let us know your desired conditions.

Requirements for test samples

In general:

The testing can be carried out in new and pre-treated or used condition. Please let us know your desired conditions.

Amount of material:

For testing in new, pretreated or used condition: at least 20 cm x 30 cm (approx. DIN A4) of each material and colour, for light colours at least 40 cm x 40 cm of each material and colour

Duration of testing:

10 working days after receipt of order and samples