



Sweat odour management

Objective:

The tests evaluate the capacity of clothing to reduce or modulate sweat odour. Modern underwear or sport shirts are made of synthetic fibres, sometimes in combination with cotton or wool. Due to fibre type and fabric construction these textiles are made to quickly transport sweat away from the body surface in order to keep the skin dry during physical or mental activity. During this process sweat odour molecules are transported through and thus influenced by the fabric.

These tests are particularly suitable for:

- Sport- and Outdoor clothing
- Work wear
- Upholstery, home textiles
- First Layer textiles

Description:

1. Efficacy against sweat odour producing bacteria

(e.g. antibacterial textiles). Based on the standard test method DIN EN ISO 20743 ("Determination of the antibacterial activity of antibacterial finished products") the antibacterial activity of the sample is quantitatively tested against the skin-specific microbes of the genera *Staphylococcus* and *Corynebacterium* after 4 h of incubation (simulated sport/work situation).

2. Release of sweat odour from fabrics

A special sweat odour simulate („artificial sweat“) is applied on the sample. After an incubation period, the sweat odour intensity evaporating from the fabric is assessed by odour panellists.

2.1. Binding capacity of fabrics for sweat odour molecules

A special sweat odour simulate („artificial sweat“), which contains radioactively labelled lead substances of odorous sweat, is applied on the sample. After an incubation period, remaining odour molecules on the fabric are quantified.

3. Sweat odour field tests

Samples are worn by a group of test persons in an application-specific activity (e.g. sports, work). Sweat odour intensity is then evaluated in comparison to a reference fabric by trained panellists using an olfactometric sampling unit. The field test can thus prove an anti-sweat odour effect from the consumer's point of view and comprises the sum effect of all modes of action, e.g. an improvement of ventilation effects, anti-odour finishes and construction principles.

Customer benefit:

- Practical evaluation of the product
- Product optimization
- Advertising impact

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Marketing Instruments - Labels and Certificates:

The results of the tests #1 and #2 can be displayed on a Certificate.

On passing the test #3 the product may be awarded the Quality Label "ALL DAY FRESH". The proven layout of the label family "proofed quality – Hohenstein Institute" has great recognition value. Customers can easily assure themselves of the exceptionally quality of a product.

Test sample requirements:

General:

- Test samples must cover the entire group of articles
- Please indicate adequate names and specific denotations of the sample (composition of material, article number, etc.)

Quantity of material:

- At least 20 g of the test sample (1.; 2.)
- variable, depends on number of test persons (3.)

Duration of the test:

- 2 – 3 weeks (1.; 2.); the date will be confirmed once the test sample has been received
- 4 – 8 weeks (3.); the date will be confirmed once the test sample has been received