

Impermeability to mite faeces allergens

Allergen-proof sheets can protect house dust mite allergy sufferers from mite allergens and reduce symptoms.

The test verifies the impermeability of bedding and encasings to the allergenic mite excrement. The end product can be marked with a label if it passes the test.

This test is particularly suitable for

- Manufacturers of bedding and encasings
- Textile manufacturers
- Hotel industry and gastronomy



Description

The impermeability of bedding or encasings against mite faeces allergens is tested with a specially developed loading test bench. This involves applying a defined quantity of mite faeces allergens to the test specimens and a load is simulated by pressure and friction. The quantity of mite faeces allergens that was able to permeate the test specimen is then determined using the enzyme-linked immunosorbent assay (ELISA) technique. The test set-up indicates the impermeability of the test specimen and thus the suitability of the product for allergy sufferers.

Customer benefit

- Consumer safety
- Minimisation of complaints
- Optimisation of product
- Marketability of goods

Marketing Instruments – Labels and Certificates

On passing the test with proven effectiveness the end product may be awarded with the Quality Label “Dust and Dust Mite Barrier”.

Test sample requirements

General

- Ensure labelling of test specimens is sufficiently precise (composition of materials, article numbers, storage if applicable, etc.).

Quantity of material

- Complete test specimen, small patterns (e.g. pillows) require 2 test samples

Duration of the test

- 2 – 3 weeks; confirmation of duration following receipt of test specimens

Test criteria

- The retention capacity for mite allergens of a test sample is detected in comparison to the negative control.
- If the textile surface, the seam and the zipper each reduce the mite allergen amount to $\geq 80\%$ Der p 1 in comparison to the negative control, the test sample can be certified as “impermeable to mite droppings”.