

The problem: mould fungi and house dust mites

Someone who sleeps in a healthy and fresh environment at night can often cope much better with the challenges of the day. People, who are allergic to house dust need an environment free of house dust mites – in particular while asleep – since the excrements of the mites are the origin of the dust mite allergy. Mites mostly live in dark, warm and humid or badly vented areas – especially in our beds. They subsist on human danders which are split up by mould fungus and, consequently, become digestible for the mites.

Mould fungi – as such also the origin of allergies with symptoms in the airways – arise from wrong or too short airing in our well-insulated apartments. They particularly settle in fabrics with untreated cotton whose so called fibre concomitant substances offer a perfect food basis.



Already after one day under wet and warm conditions fabrics that were not treated with **Medicott**® show mould stains, which clearly indicate a rapid growth of toxic mould fungi.

Once the settling of mould fungi in fabrics made of cotton or containing a high percentage of cotton can be effectively prevented even in wet conditions, the substantially allergy-causing basis and the food basis for the house dust mites are destroyed. The mites themselves and their excrements no longer appear and allergic persons can breathe again freely.

The solution: Medicott®

Medicott® is the solution against the settling of mould fungi in fabrics made of cotton or containing a high amount of cotton. **Medicott**® is an innovative finishing process which dissolves the so called fibre concomitant substances from the cotton. Consequently, **Medicott**® hinders the development of mould fungi considerably, even upon longer impact of wetness. **Medicott**® does not contain fungicides or microcides and has a lasting effect if cleaned regularly.



Provided they are regularly cleaned or washed, **Medicott**® fabrics prevent the development of mould fungi even under longer storage in wet conditions.

Medicott® has a natural effect

Medicott® is based on an environmentally sound and energy-saving process which Bodet & Horst developed in cooperation with Professor Gunter Grüninger of the Steinbeis Technology Transfer Centre for Textile Processing at the University of Reutlingen.

In this two-level extraction process the fibre concomitant substances are dissolved from the cotton. In the first level, the fabric is boiled with sodium hydroxide solution. In the second level it is bleached with hydrogen peroxide. Both, sodium hydroxide solution, which the consumer may also find in bakery products, and hydrogen peroxide, which is used for the production of food, cosmetics and dressings, are entirely harmless in terms of human ecology – this is approved by the ECO Institute for the Environment in Cologne.

Medicott® silver – no chances for bacteria and unpleasant odours

With **Medicott**® silver Bodet & Horst uses an effective anti-microbial finishing that combines the advantages of **Medicott**® with the anti-bacterial effect of silver. Micro-organisms are removed from the textile surface of the mattress cover and their resettlement is permanently prevented. Up to now, silver had always been used in the form of fine silver filaments or vacuum-evaporated fibres.

The **Medicott**® silver finishing of Bodet & Horst is placed much more effectively into the fibre. The silver ions are released step by step from an almost infinite active substance depot and are therefore able to prevent the creation of unpleasant odours. This provides welcoming freshness in the bedroom – during the day and at night.

This effect is permanent, even upon frequent washing or cleansing – a freshness depot without limits, that also helps saving money, since a mattress cover that has a **Medicott**® silver finishing is already bacteria free after a 40°C washing. This saves energy and is easy on your purse.

The anti-bacterial effect of silver

The silver ions placed in the **Medicott**® silver are controlling the bacteria with the help of a three-way mechanism:

1. Blocking of oxygen – transporting enzymes
2. Deactivation of sulphurous proteins of the bacterium
3. Locking of the cell membrane

The bacteria are controlled directly on the textile surface by means of silver ions. Due to the three-way mechanism the development of adapting bacteria is prevented. It is not possible for bacteria to adapt to three modes of action and build up a resistance against silver.