

## **Anti-microbial textiles UNIMENTO / BASIC IV UN**

### **What are microbes?**

Microbes are microscopically small, independent living organisms, they are also called micro-organisms. Micro-organisms encompass bacteria, viruses and fungi (moulds and yeasts). They are single or multi cell organisms which can be pathogens for infectious diseases.

### **What is meant by anti-microbial textiles?**

The anti-microbial effect of textiles counteracts the colonisation and multiplication of micro-organisms and odour development on/in treated textiles.

### **What does the anti-microbial finish bring about and how does it work?**

An anti-microbial finish in textiles hampers the growth of micro-organisms or destroys them. In the production of our anti-microbial fabrics, silver ions are lodged within the fibres during the finishing process by anchoring the anti-microbial substance within the fibre polymer firmly in an even distribution. The silver ions which are tied in with the fibres disrupt important functions of the micro-organism's cell, preventing any further cell division, i.e. controls the number of cells.

Our textiles possess a bacteria-static effect, meaning they hamper a bacteria's growth. This anti-microbial function is effective against bacteria which are directly deposited on the weave.

### **What has to be taken into consideration in anti-microbial textiles**

- A very high resistance to washing and dry cleaning is required for effective textile maintenance. Our anti-microbial textiles retain their anti-microbial efficacy even after a large number of 60°C wash cycles.
- Items in flame retardant polyester, retain their flame retardant qualities even with an anti-microbial finish, meeting all required standards for flame retardant properties.
- Product manufacture takes ecology into account. The anti-microbial finish does not have a negative impact on the biological clearance and classification of the wastewater treatment. It therefore meets the Öko-Tex Standard 100.
- The effective substances are harmless to health and do not affect the skin flora.

### **Test methods and monitoring of effectiveness**

There are several different test methods which monitor the effectiveness of built in anti-microbial functions.

Textiles from Création Baumann are fitted with a non-migrating anti-microbial finish i.e. they are only effective in the textile but achieve virtually 100% efficacy in the control of bacteria. The test method for this type of microbial textiles is ASTM – E2149-01/10. Vibration is used to test and evaluate the relationship of the anti-microbial finished textiles with a solution of bacteria.

### **Applications for anti-microbial textiles**

The biological technology of anti-microbial textiles makes a preventative contribution to hygiene in clinics, hospitals, senior residences or other areas of heightened sensitivities in the health care sector.

### **Additional finish for other products**

Most of our products can be fitted with an anti-microbial finish.

The minimum quantity starts at 50 running meters with a basic service fee, from 100 m with an additional cost per running meter, the cost depends on the quantity of the order.