## **Technical Data Sheet**



## Microbat 103

## 1) Product Description

The anti-microbial finishing agent **Microbat 103** is durable hygienic finishing agent, featuring safe, highly efficient and extensive anti-microbial properties, wash-fast, as well as no influence on whiteness, shade, strength, handling and permeability of the treated fabric. Microbat 103 is suitable for finishing all common textile material and mixtures thereof that are in direct contact with the skin. Application examples include: sportswear, work-wear, lining fabrics, underwear, terry fabrics and articles, socks, hosiery, pullovers, woollen and acrylic blankets, sheepskins, filters, underlay's, underwear, uniforms, upholstery, non-woven's, bathroom rugs, bedding.

## 2) Properties

**Appearance** Slight color liquid

**Ionicity** Non-ionogenic organic anti-microbial agent

Solubility Soluble in water.

pH value PH of 1% solution is 6.0-8.0.

**Compatibility** Can principally be applied in combination with others

> textile chemicals such as foaming agents, resins, binder systems, fluorocarbons, anti-soil products, softeners, antistatic products and flame retardants. Compatibilities,

however, should be tested in advance.

1.00~1.05 g/cm3 Density at 20°C

**Temperature Stability** Drying/Curing: up to 150°C

#### 3) Application

- 3.1) 4.0~5.0% of **Microbat 103** relative to the dry weight of the textiles to be finished.
- 3.2) Microbat 103 can be treated on to the textile products by means of padding, exhaustion, coating and spray application methods.
- 3.3) Padding: - Undiluted Microbat 103 should be added to the bath under stirring condition as last component while stirring to homogeneity. The absorption properties may be improved by adding a wetting agent.
- 3.4) **Microbiological Tests: -** In order to check the antimicrobial effectiveness on the treated textiles, the following test standards are recommended: AATCC-100 1998 or AATCC 147.

#### 4) Advantage

- Long-lasting hygienic freshness and optimal wear comfort 4.1)
- 4.2) Safe and hygiene
- Can prevent development of bacterially caused odours 4.3)
- Has no adverse influence to fastness to water and color of the treated fabrics 4.4)



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## 5) Action Mode of the agent

- 5.1) Substrates protected with **Microbat 103** are noted for their proven, outstanding skin tolerance and are safe to man and environment
- 5.2) **Microbat 103** has a reliable and durable anti-microbial effect against a large number of gram-positive and gram-negative bacteria
- 5.3) Its activity on the cell disrupts the metabolic process of unwanted microorganisms and thus interrupts their ability to function, grow and reproduce

## Safe use and handling

Good hygienic and industrial practices should be followed and, when employed as recommended, **Microbat 103** will not present any hazard. However, prolonged skin contact with the neat product should be avoided and any splashes on the skin should be washed off with water.

The information herein is, to the best of our knowledge, correct and complete. It is based not only on the work in our laboratory but also on the reported results of other workers in this field. It is offered without guarantee of specific properties and no patent liability is assumed. No liability can be accepted for any loss, injury or damage resulting from its use.