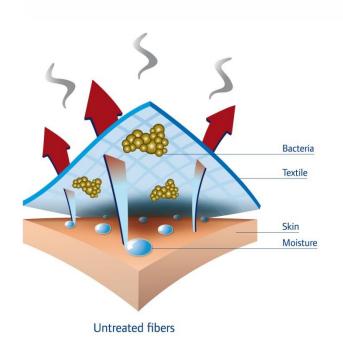


## Sanitized® T 11-15 For more freshness



- New Silver technology no particles
- Works like a built-in deodorant
- Durable hygiene function for all day freshness
- The unique delivery system of this Sanitized® product is the only credible and reliable alternative to the traditional silver technology
- A revolutionary antimicrobial technology for proven long-lasting freshness and reliable protection against unwanted bacteria that causes unpleasant odor.
- Provides a durable, heat and light stable silver antibacterial finish
- Effective against bacteria and micro-fungi and yeast.





Sanitized®
Textile
Skin
Moisture

Textile with Sanitized® hygiene function for long-lasting freshness.

### Characteristics of Sanitized® T 11-15

Swiss antimicrobial expertise since 1935





### **Transparent & clear**

- Based on silver
- Complex stabilized silver in a polymer matrix
- \_ Slightly anionic
- \_ Clear to hazy

## Sanitized® T 11-15 Technical benefits

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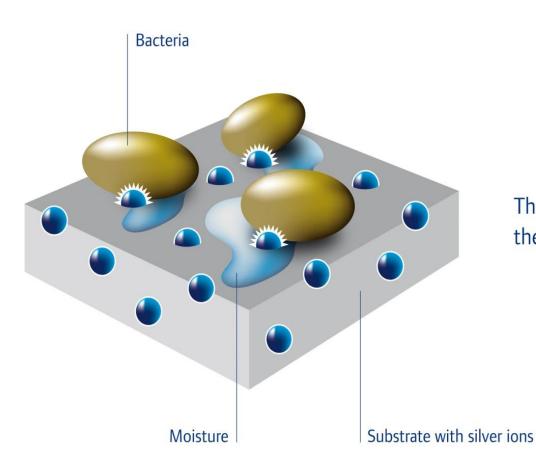
- No yellowing properties
- No impact on degree of whiteness
- No impact on thermo-migration
- High temperature stability (up to 190° C)
- Non-ionic characteristic for best possible compatibility with other finishing chemicals
- Can be used with all colors and shades
- Application by padding, exhaust, coating and Lavatec
- No binder is required
- No impact on handling
- Exhaust ratio > 98 % on all common fabric
- Sanitized® Spotlight marker technology available for this product (separate product solution)

### Sanitized® T 11-15 Benefits of this silver product



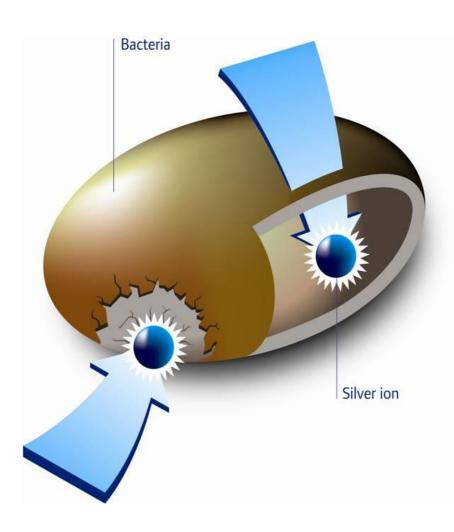
- New Silver technology: no particles, complex stabilized silver in a polymer matrix
- No nano technology
- Forms an extensive polymeric network on the fabric
- Uses the same mode of action like traditional silver ions





The silver ion locates the bacteria via the moisture and deactivates it.





This is the effect silver has on bacteria:

- 1. Cell membrane is destabilized
- 2. Respiration is prohibited
- 3. Food (nutrient) intake is impeded
- 4. Cell division is inhibited



Sustainability is of key importance already during the research and development phase of our products. Wherever possible, new developments are designed so that resource-saving application technologies can be used in the textile and polymer processing industry.

### Sanitized® T 11-15 Ecology



- \_ Little to no environmental release of active substance due to the excellent wash durability.
- No particles. Particulates are not released into the environment.
- No nanotechnology.
- \_ Helps processing plants to reduce their overall raw material purchases and usage of energy and water.
- Sustainable product: Excellent ecological properties and low amount of silver needed for positive effect

### Sanitized® for more peace of mind

Swiss antimicrobial expertise since 1935





- Gentle to the skin and dermatologically tested.
- OEKO-TEX Standard 100,
   bluesign<sup>®</sup> and Responsible Care approved.
- \_ Gives consumers peace of mind.
- Saves energy and water during the entire life cycle of the article.









# Sanitized® T 11-15 Product safety





- OEKO-TEX approved
- \_ bluesign® approved
- \_ EPA registered



### Advantages of an antimicrobial effective substance

### Extensive use for hundreds of years

- The Romans used silver for the disinfection of drinking water.
- Dental medicine

### Medical application

- Catheters are often coated with silver to reduce danger of infections
- Wound care
- \_ Eye drops for newborns



#### In food

Silver as food additive is given the E number E174 and classed as a food coloring (chocolate confectionary).

### **Established technology**

- Comprehensive investigation about antimicrobial efficacy from silver
- Approved effectiveness on textiles

Sanitized

### Sanitized® T 11-15 Fields of application



### **Apparel**

Undergarments, outerwear, work, sport and outdoor clothing

#### Home textiles

Upholstery, curtains, bathroom sets, towels, kitchen towels, table cloths, wipes

#### **Bedding**

Mattresses, covers for pillows and duvets, bed sheets, fitted sheets, bed and pillow cases, molleton

#### **Medical**

### Sanitized® Silver product overview



### Sanitized® T 11-15



#### **Traditional Silver**





### **Antibacterial testing**

- \_ AATCC 100 (Count Test)
- \_ Recommended application concentration 1-2 % of Sanitized® T 11-15 o.w.f (PES 2-3 %); > 20 washings

### **Antifungal testing**

- AATCC 30-III (Mineral salts agar without additional 3 % glucose, cultured for 14 days)
- Recommended application concentration 3-6 % of Sanitized® T 11-15 o.w.f; only original – not washfast

### Sanitized® T 11-15 Key arguments

sanitiged

- No impact on degree of whiteness
- \_ Highest exhaust ratio > 98 %
- Best product for lavatec application
- Longest durability with lowest amount of silver
- No negative impact on thermo-migration
- No impact for phenolic yellowing
- \_ Excellent compatiblity properties
- No Ag particles

Swiss antimicrobial expertise since 1935

Sanitized.



Swiss antimicrobial expertise since 1935





#### The Sanitized® licensing process.

- 1. Project launch
  Definition of the
  specifications
  and application
  process; microbiological tests on
  your products.
- 2. Licensing agreement

  An agreement is

  drawn up and signed

  based on the tested

  effectiveness.
- 3. Marketing
  communications
  Support in the planning
  and development of
  your individual
  concepts with the
  Sanitized® brand.
- 4. Quality controls

  Tests are regularly carried out with the Sanitized® brand in accordance with the agreement and international standards.

