

Sanitized[®] T 11-15

Best available freshness
technology.



Sanitized[®] Silver product overview.



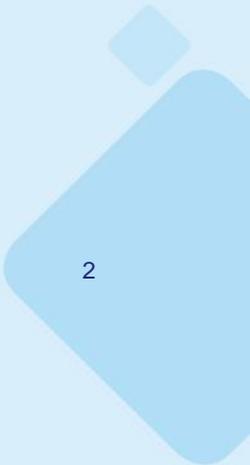
Sanitized[®] T 11-15



Traditional Silver



Traditional Silver



Sanitized® T 11-15.

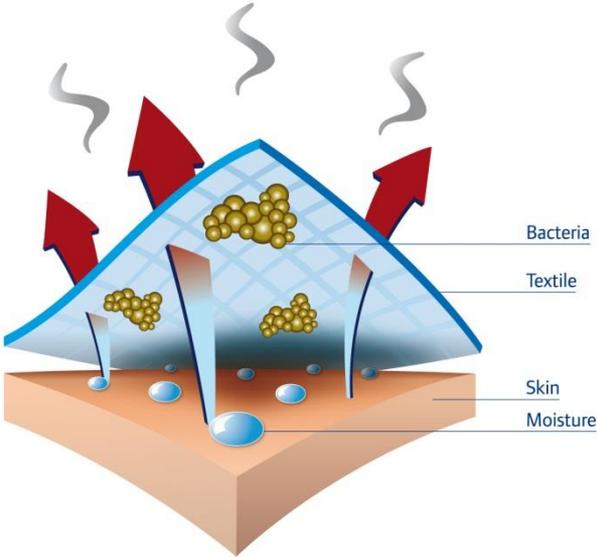
For more freshness



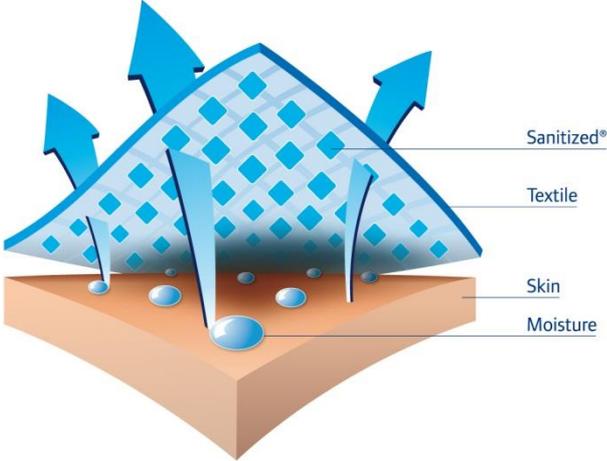
- › New Silver technology – no particles
- › Works like a built-in deodorant
- › Durable hygiene function for all day freshness
- › The unique delivery system of this Sanitized® product is the only credible and reliable alternative to the traditional silver technology
- › A revolutionary antimicrobial 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[®] hygiene function.

Freshness



Untreated fibers



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

Characteristics of Sanitized® T 11-15.

Transparent & clear

- › Based on silver
- › Complex stabilized silver in a polymer matrix
- › Non-ionic
- › Clear to hazy





Sanitized® T 11-15.

Technical benefits

- › 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)

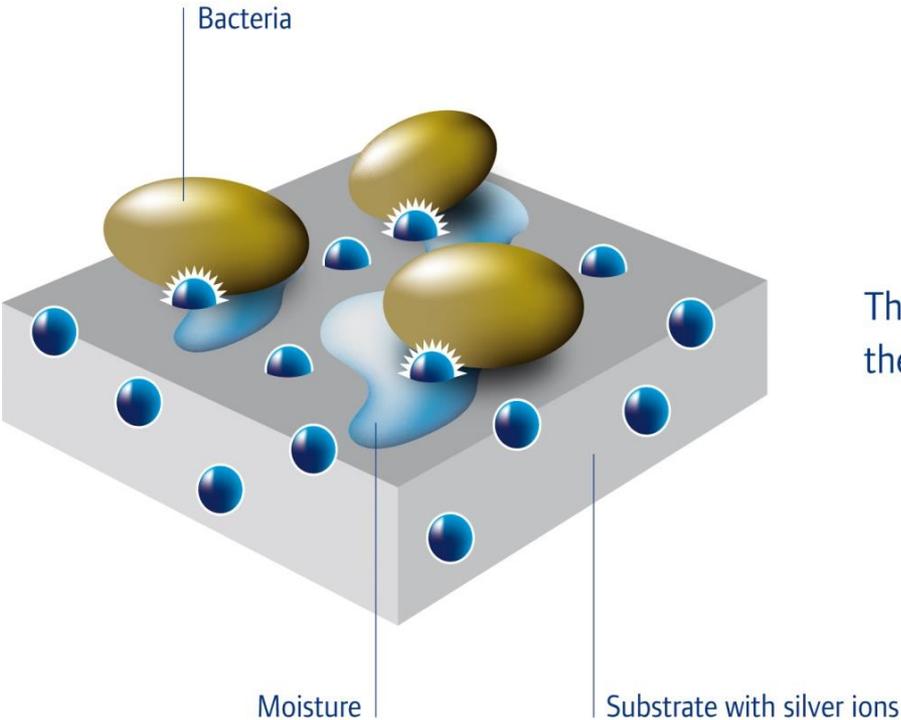


Sanitized® T 11-15.

Benefits of this silver product

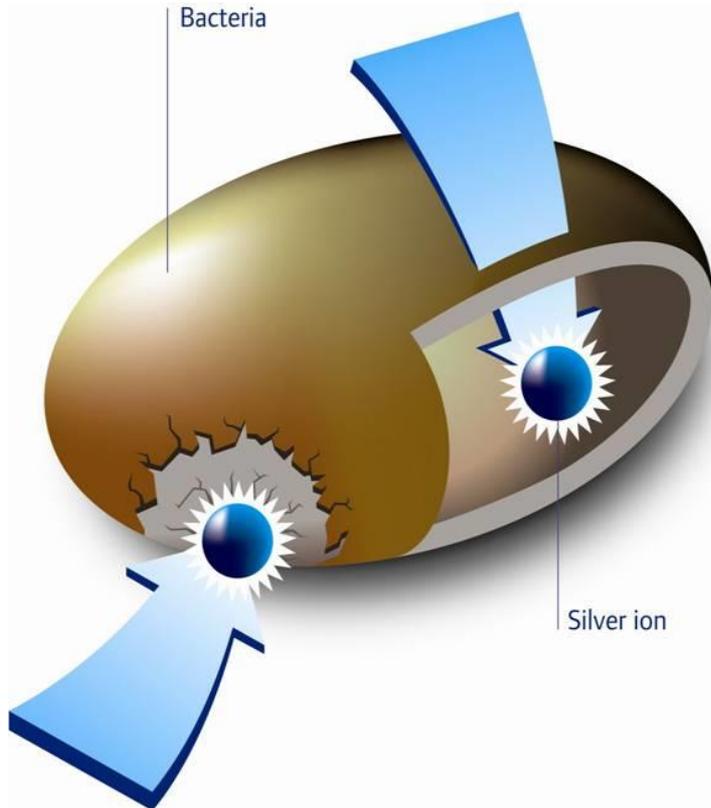
- › New Silver technology: no particles, complex stabilized silver in a polymer matrix
- › Not nano technology
- › Forms an extensive polymeric network on the fabric
- › Uses the same mode of action like traditional silver ions

Silver process.



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

Silver mode of action.



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

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.



- › Gentle to the skin and dermatologically tested.
- › **“OEKO-TEX Standard 100”**,
- › **“bluesign®”**, 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.

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**



Test methods.

Preferred and recommended test method

Antibacterial testing:

- › AATCC 100 (Count Test)
- › Recommended use 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 use-concentration 3-6 % of Sanitized® T 11-15 o.w.f
only original – not washfast



Sanitized® T 11-15.

Key arguments

- › 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 compatibility properties
- › No Ag particles



Facts about Silver.

Safe for man and environment.

Advantages of an antimicrobial effective substance:

Extensive use since 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



Facts about Silver.

Safe for man and environment.

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



Making decisions as partners.