



Bac-Pure[®]
Antimicrobial
by Smart Innovation[®]

Benefits of Si Bac-Pure[®]

- *Keeps your textiles clean and odor-free.*
- *Easy to apply and cost-effective.*
- *Sustainable, high efficacy and long durability.*
- *Maximum added-value for your product.*

FACTSHEET

Si BAC-PURE[®] ANTIMICROBIAL 101-TF

TEXTILE FINISH

PRODUCT DESCRIPTION

Sustainable functional finish with antimicrobial properties. This treatment is effective for more than 100 washes in the fight against bacteria, fungus, mould and unpleasant smells. Ideal for odor-control and for the prevention of textile contamination and degradation. Si Bac-Pure[®] provides long-lasting hygiene, freshness and cost-effective added-value to your textiles, fabrics, garments, fibres and nonwovens.

EASY APPLICATION

Although the Si technology by Smart Innovation[®] is unique and patented in 147 countries, Si Bac-Pure[®] is applied at the manufacturing stage using the existing traditional finishing processes. It is supplied as a liquid and can be applied via padding, exhaustion, kiss-roll or spraying. Si Bac-Pure[®] is compatible with several other textile finishes and can be applied on both synthetic and natural fibres.

SAFE AND EFFECTIVE

Our products are tested according to international standards to meet regulatory requirements and demanding costumers. Si Bac-Pure[®] is BPR approved, Oeko-Tex Standard 100 compliant and dermatologically tested. With Si Bac-Pure[®], over 99% of the bacteria on your textiles are eliminated beyond 100 washes.

ECO-FRIENDLY

Smart Innovation[®] manufactures only environmentally sustainable functional treatments. The active ingredient used in Si Bac-Pure[®] is USA EPA approved, REACH compliant, does not contain Substances of Very High Concern (SVHC), has no toxicity and no environmental impact. We don't use silver or other toxic substances.

LESS WASHES, LESS WATER, MORE SUSTAINABLE

With Si Bac-Pure[®] you don't need high temperature water to wash off unwanted microbes. This functional antimicrobial treatment will be constantly killing bacteria and fungus, contributing to saving water and energy due to less washes, lower temperature and lower detergent use. Less washing also means increased material durability.

THE ACTIVE INGREDIENT

The active ingredient used in Si Bac-Pure[®] is Benzalkonium Chloride which is an organic salt classified as a quaternary ammonium compound. This substance is not harmful, has no environmental impact, has excellent antimicrobial activity, and has been in the market for decades. BKC is currently used in many consumer personal care products such as wetwipes, shampoos, hand sanitizers, pharmaceutical products such as eye drops, skin antiseptics, and also in surgical medical disinfection.

ANTIMICROBIAL ACTIVITY

Si Bac-Pure® has been tested against various microorganisms and has proven excellent efficacy results in the elimination of most types of bacteria (gram-positive, gram-negative and multi-resistant) and fungus.

Bacteria

- ASTM E 2149-13a - *Staphylococcus aureus* (ATCC 6538)
- ISO 20743:2013 - *Staphylococcus aureus* (ATCC 6538)
- ASTM E 2149-01 - *Staphylococcus aureus* (ATCC 6538)
- ASTM E 2149-01 - *Klebsiella pneumoniae* (ATCC 4352)
- ASTM E 2149-01 - *Escherichia coli* (ATCC 25922)
- NP EN ISO 20645:2004 - *Staphylococcus aureus* (ATCC 6538)
- NP EN ISO 20645:2004 - *Klebsiella pneumoniae* (ATCC 4532)

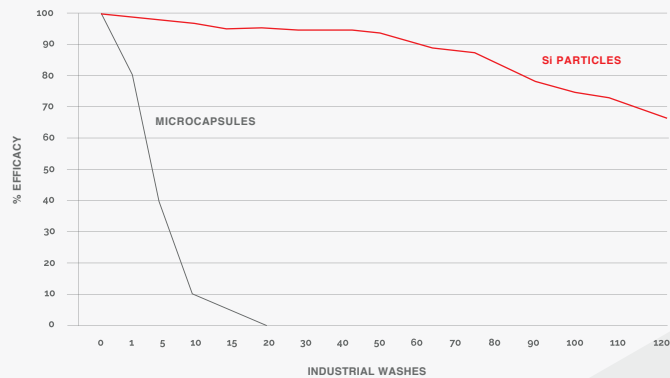
Fungus

- NP EN 14119:2005 - *Trichophyton mentagrophytes*
- NP EN 14119:2005 - *Tricophyton rubrum* (ATCC 28188)

MICROCAPSULES vs Si PARTICLES

Our patented technology does not use microcapsules. The Si technology consists of a matrix of silica (Si) particles which carry the active ingredient on their surface and fixes it on the substrate, providing durability, high-performance and washing resistance. Unlike microcapsules, our innovative system is not affected by temperature, friction, UV exposure or other factors.

+ 100 WASHES



WHERE TO APPLY

- Sportswear
- Workwear
- Medical
- Underwear
- Bed linen
- Mattress ticking
- Home textiles
- Socks
- Shoes and insoles

THE Si HANGTAG

Innovative functions and added-value features must be promoted strongly. Use the Si hangtag to communicate the odor-management antimicrobial protection incorporated in your products! This will help promoting the advantages and characteristics of Si Bac-Pure® to the final customer. We provide 50 hangtags free of charge for every kg of product purchased.

