



BeSo[®] GUARDED

Antimicrobial agent for application on garments

With HeiQ Viroblock NPJ03 *by CHT*

BeSo[®] GUARDED

- ▶ Effective against microbials (99.99%)
- ▶ Antimicrobial activity on finished textiles approved (ISO 18184)
- ▶ Protect yourself and your environment

TOGETHER
AGAINST
COVID-19
FROM PROFESSIONALS
FOR PROFESSIONALS



CHT

SMART CHEMISTRY
WITH CHARACTER.

Antimicrobial product

Antimicrobial effect to guard from microbial degradation of the textile.

CHT and HeiQ working together to offer a product that helps against microbial influences. HeiQ Viroblock NPJ03 is a united effort of CHT and HeiQ to fight the pandemic and to manufacture and supply this product to our customers.

The fast spreading of SARS-CoV-2 shows the limitation in our daily environment when it comes to hygiene and sanitation. Some types of bacteria and viruses can stay on textiles for a long period of time and increase the risk of transmission and infection. This can lead to the spread of common seasonal diseases and even pandemic outbreaks.

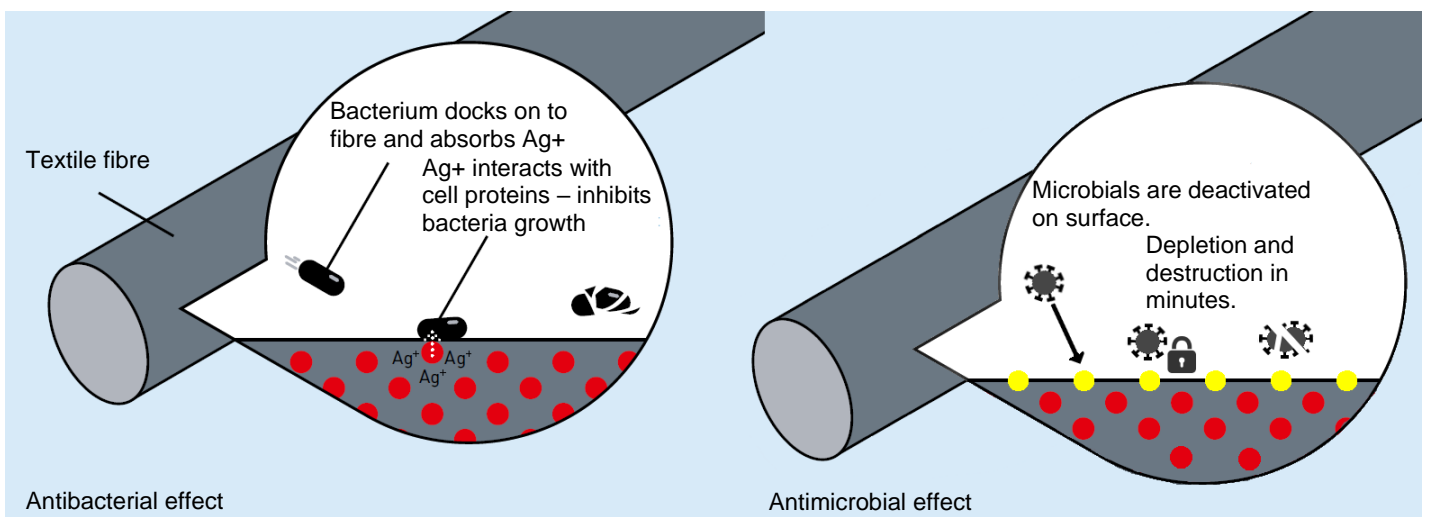
A multifunctional system

A silver-based component that effectively immobilizes and deactivates microbes on the surface. The reactive component can interact with the lipid-hull of an enveloped virus to deplete the viral membrane and destroy the virus in minutes. HeiQ Viroblock NPJ03 is secured on the fabric for long lasting effects and is suitable to use in terms of health safety (OEKO-TEX® S100).

HeiQ Viroblock NPJ03

Chemical structure: combination of silver salts and organic components
Appearance: white liquid
Ionic character: cationic
Function: Antimicrobial effect

- Registered in US EPA and EU BPR, EU REACH compliant
- Harmless to skin and body
- Listed for OEKO-TEX® S100, Class I-IV
- Wash durable (ISO 6330-4G)



Material requirements

Ideal for cotton, polyester, polyamide and their blends.

Any residue chemical products, especially anionic substances and garments containing sulphur-mixed fabrics or dyes (e.g. indigo/ sulphur black-combination), should be prewashed well.

Residues of chemicals can hinder the effect of the silver-component or even block it completely.

If the garment has not been desized and stonewashed, we recommend a prewash with the stated recipe.

Prewash recommendation

Liquor ratio 1:8

DENIMCOL WASH-CPD 1.0 g/l

or

DENIMCOL WASH-WN 0.5 g/l

10 min, 40°C

Rinse warm and cold.

Continue with normal exhaust or dipping process.

- Needed if there is risk of residues of chemicals from previous treatment steps
- Or if you want to apply the system on already finished garments

Application Process

Apply the antimicrobial finish with HeiQ Viroblock NPJ03 as a final step of the treatment of the garment or combine it with the softening step.

Exhaust method in drum washing machine

Liquor ratio 1:4 - 1:10

pH 4.5 - 5.5 with citric or acetic acid

HeiQ Viroblock NPJ03 5.0 - 20.0 %

KOLLASOL CDO 0.5 - 1.0 %

30 min, 40°C

hydro extract

dry at 95°C in tumbler

HeiQ Viroblock NPJ03 Concentration

5-10 % Non-medical use (e.g. garments, denim,...)

20 % Medical use (e.g. facemasks,...)

Tested antiviral finishing

The significant antiviral effect (logarithmic reduction of virus > 3) of **HeiQ Viroblock NPJ03** has been proven in different studies on facemasks for different viruses, including SARS-CoV-2, the virus that causes the COVID-19 infection.

Measured improved reduction of SARS-CoV-2 virus on textile of 99.99 % in 30 min.



Tested Improved reduction:

- H1N1 (Human Influenza A)
- H5N1 (Avian Influenza A)
- 229E (Human Coronavirus)
- H7N9 (2013 Influenza A)
- RSV (Resp. Syncytial Virus)
- Mycobact. terrae (ATCC 15755)

How to check for antimicrobial functionality

Step 1	Silver content analysis	AAS Industry standard method (amount of silver content on the finished garment is analysed)	CHT performs service “ pre-check ”
Step 2	Antibacterial test	HeiQ Yogurt Bac test (qualitative test)	CHT performs service “ pre-check ”
		<u>If passed, then:</u> ISO 20743 antibacterial test (comparable methods: AATCC 100, JIS 1902, ASTM E2149)	External testing lab “ validation test ”
Step 3	Antiviral test	ISO 18184	External testing laboratory (CHT/HeiQ does not perform this antiviral test)

Please note the information in the technical datasheet.

For information how to receive a fabric specific HangTag, please contact brand-retail-service@cht.com.

Regulation and Labels

HeiQ Viroblock NPJ03 is US EPA registered, EU BPR and EU REACH compliant. Please check first with CHT/HeiQ for your target market that the intended use complies with the legal requirements.

Labelling must comply with the law of the country where the articles finished with **HeiQ Viroblock NPJ03** shall be placed on the market (Trademark licence agreement mandatory). The distributor guarantees the legitimacy of the labelling in the individual case. CHT Germany GmbH is not liable for labelling which are made for finished articles.

Use biocides safely. Always read the label and product information before use.

In case of question, please contact jeans-garments@cht.com for information.

Find more smart effects with character:
www.cht.com/beso



For further information please feel free to contact us by e-mail:

JEANS-GARMENT@CHT.COM

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