

aguaguard⁺ 365

Anti-Microbial Technology Powered by HeiQ ViroBlock



Areas highlighted are examples of fabrics prone to infection. Our product is an effective barrier to viral and bacterial infection.

State of the art anti-bacterial fabric technology powered by HeiQ ViroBlock

What is it?

A safe, highly advanced anti-bacterial protection system for upholstery fabrics, also effective against viruses including Covid-19.

Why bother?

The value of, and requirement for materials with these properties has been unequivocally validated by recent and ongoing global public healthcare crises.

Whilst research indicates viruses and bacteria survive longer on hard surfaces, soft surfaces like textiles can provide a large hosting area and benefit their carryover.

Definitions & Differences

Viruses

Infectious substances (DNA or RNA) that usually infect specific cell types (of plants, animals, humans) Mostly harmful and can cause diseases.

Bacteria

Single cell organisms that form a natural part of the environment, and are present in large numbers inside and on the outside of the human body. Mostly harmless, but some bacteria can cause harmful diseases.

Virus Types

Enveloped (by a lipid, fatty, cholesterol rich membrane), applies to more than 60% of all existing pathogenic viruses.

Non-enveloped:

Gram Positive*

– possess no outer lipid membrane

Gram Negative*

– possess an outer lipid membrane

Size

Viruses are smaller than bacteria. Typically 20-300nm vs 1000nm.

Replication

A virus invades a living host cell which replicates and releases new virions (the complete infective form of a virus outside of a host cell). Viral infections are governed by complex interactions between the (negatively charged, enveloped) virus and (positively charged) human cells.

Bacteria multiply rapidly by simple cell division.

Examples

Virus

Coronaviruses including Covid-19, Human and avian influenza virus (H1N1, H5N1), Herpes simplex virus, Hepatitis virus, HIV

Bacteria

Gram pos.: Staphylococcus aureus, MRSA ("golden staph"), MSSA;

Gram neg.: Escherichia coli, Klebsiella pneumoniae, Salmonella typhimurium

How does AguaGuard365 powered by HeiQ ViroBlock work?

In simple terms it is comprised of two synergistic elements:

1. A patented and registered silver technology

Small silver particles are potent antibacterial and antiviral agents due to a high surface area to volume ratio and unique chemical and physical properties. Small silver particles are effective against viruses, effectively eliminating them following short exposure of isolated

viruses to silver.

Like a magnet, silver attracts the oppositely charged viruses and binds them permanently to their sulfur groups (forming silver sulfide) ensuring that the virus is immobilised.

By incorporating state of the art Silver Chloride rather than nano silver particle technology complete safety is assured.

2. A pending patent fatty vesicle technology

This acts as a booster to the silver technology that physically destroys viruses.

The fatty spherical vesicle technology functions by directly targeting the lipid envelope (membrane) surrounding the virus.

The vesicle technology helps to deplete the viral membrane of its cholesterol content thereby destroying the virus.

The vesicles rapidly destroy the virus through a physical contact mechanism (cholesterol sink).

Safety, Sustainability and the Environment

AguaGuard365 is:

- Harmless to the skin and body
- Uses a minimum of active ingredients
- EU BPR (Biocidal Products Regulation) and EU REACH (Registration, Evaluation, Authorisation & Restriction of Chemicals) compliant.
- Carries Bluesign, EPA, Oekotex and ZDHC (Zero Discharge Of Hazardous Chemicals) approval and certification.

Summary

Upholstery fabrics treated with AguaGuard365 actively inhibit viruses (including Covid-19) and kill bacteria upon contact on the surface.

By keeping the textile free of viable viruses and bacteria, AguaGuard365 treated performance upholstery fabrics help to significantly minimise the potential for re-transmission of pathogens.

* Gram refers to the staining system invented in 1884 by and named after the Danish bacteriologist Hans Christian Gram to identify the two major types.