





INTRODUCTION: HYGIENE THROUGH MATERIAL INTELLIGENCE

In a world with increasing demands for hygiene and safety, functional surfaces are gaining rapid importance. Silver, valued for its antibacterial properties for centuries, now plays a key role in modern self-disinfecting materials.

Due to growing urbanization, global mobility, and heightened sensitivity to germ exposure, materials with active hygiene functions are becoming increasingly essential. Antimicrobial silver-based coatings offer an effective, long-lasting, and technically proven solution—both in stationary and mobile applications.

BLOOH Solution Ltd. develops highly effective silver coatings that actively combat bacteria, fungi, and viruses. Our technologies are used in medical technology, public spaces, aerospace, and packaging systems with enhanced hygiene functions.

BS BREAKTHROUGH

BLOOH Solution relies on ion-active, release-stable silver components embedded in robust matrix systems. Even at low silver concentrations, the coatings demonstrate long-lasting effectiveness and retain their antimicrobial properties for months—even under high humidity, temperature stress, or repeated cleaning cycles.

Our formulations are toxicologically tested, biocompatible, and comply with international standards such as ISO 22196 and JIS Z 2801. Thanks to flexible carrier materials, wet coating techniques, and physical deposition processes, BLOOH Solution silver layers can be applied in a wide range of ways.





Technological Highlights of BLOOH Solution:

- · Reduction of germs by >99.9% within 4 hours
- Broad-spectrum efficacy against bacteria, fungi, and enveloped viruses (e.g., SARS-CoV-2)
- · High abrasion resistance and chemical stability
- · Suitable for metal, glass, plastics, and textiles
- Heat resistant up to 160 °C / autoclavable

Areas of Application:

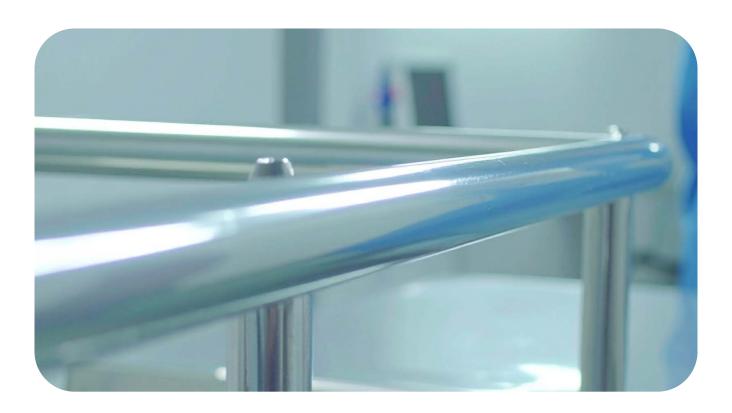
- · Medical devices, handles, touch surfaces, buttons
- · Interior fittings of vehicles, airplanes, trains
- Packaging for food, cosmetics, and pharmaceuticals
- Air filtration systems and air conditioning units in public facilities

BLOOH Solution coatings can be seamlessly integrated into existing systems and provide long-lasting hygiene protection without compromising design.



MODEL AG-PROTECT MEDICOAT

Biokompatible, antimikrobielle Beschichtung für medizinische Oberflächen und Geräte mit direktem Hautkontakt. Erfüllt strenge regulatorische Anforderungen an Wirksamkeit und Sicherheit. Die Formulierung kombiniert nanoskalige Silberpartikel mit langzeitaktiver Ionentechnologie, wodurch sowohl schnelle Anfangswirkung als auch nachhaltiger Schutz gewährleistet sind. Ideal geeignet für den Einsatz in Kliniken, Pflegeeinrichtungen und sensiblen Patientenumgebungen.



TECHNICAL SPECIFICATION

Silver Form: Nanoscale + ion-active Germ Reduction: >99.99% (ISO 22196)

Sterilizability: Autoclave, UV, ethylene oxide Abrasion Tests: >5,000 wipe cycles (isopropanol)

Application Methods: PVD, dip coating, painting Substrates: Stainless steel, ABS, PU, silicone

Additional Benefit: Long-lasting antimicrobial effect without toxic emissions or surface alteration.



MODEL AG-PROTECT HYGIENICX

Silver-based protective coating for high-touch surfaces in public and commercial spaces. Designed for retrofitting vehicle interiors, devices, and workstations. The coating forms an invisible, durable protective layer that remains antimicrobial even under heavy use. Particularly well-suited for hygiene concepts in transportation, educational institutions, and retail environments.



TECHNICAL SPECIFICATION

Spectrum of Effectiveness: Bacteria, mold, enveloped viruses

Application Methods: Spray, wipe, or paint application

Contact Clarity: Available in transparent, glossy, or matte finishes

Durability: >6 months under intensive use

Drying Time: <30 minutes

Cleaning Tolerance: Suitable for disinfectants and

alcohol-based cleaners

Additional Benefit: Quick to apply, ideal for large-scale applications with high hygiene demands.

DRIVING INNOVATION FORWARD!

