

# Who is Microban International?

Founded in 1984 by three biomedical engineers, Microban International, Ltd. is the global leader in built-in antimicrobial solutions.







Globally acknowledged as a business trustmark, Microban<sup>®</sup> is partnered with 250+ companies worldwide and the Microban<sup>®</sup> brand is proudly displayed on products in over 30 countries.

# **Did You Know?**

Microbes are everywhere, covering the products and surfaces that we encounter every day. On an unprotected surface, microbes can double in number every 20 minutes! That's why, now more than ever, consumers are looking for products with an added level of protection from microbes.

# What is Antimicrobial Technology?

Antimicrobial technology is a solution that inhibits the growth of microorganisms such as bacteria, mold and mildew.

Microban® has a portfolio of over 25 approved organic and inorganic antimicrobial technologies. Depending on the manufacturing process and material application, these technologies are formulated into additives that are then integrated seamlessly into a product.

# What Effects Can Microbes Have on Products and Surfaces?

Products and surfaces used in homes, healthcare facilities, commercial kitchens and other environments are often subjected to moisture, heat, humidity, and use by multiple people. These conditions, combined with lapses in cleaning protocols, make products and surfaces susceptible to the growth of harmful bacteria, mold and mildew.



#### **Staining**

Microbial growth can cause products and surfaces to look unsightly



#### **Bad Odor**

Microbes can result in the omission of foul-smellina odors



#### **Premature Degradation**

Microbes can negatively impact the durability of products and surfaces



#### **Invisible Concerns**

Microbes can survive on products and surfaces for several weeks, although surfaces may appear clean to the naked eye

# The Solution:

# **ANTIMICROBIAL TECHNOLOGIES**

Microban's proven antimicrobial technologies continuously combat the uncontrolled growth of microbes. Integrated at the stage of manufacture or applied as a post-treatment coating, our unique compounds are carefully customized for each product's production process, specifications and end-use, ensuring seamless integration and high levels of efficacy.







# 24-Hour Time Lapse: Untreated Polymer vs. Microban® Treated Polymer

Using confocal imaging, Microban® has captured the differences in bacterial growth on an unprotected polymer surface versus a Microban® protected polymer surface. On an untreated surface, the bacteria thrive and reproduce rapidly.

On a Microban® treated surface, bacteria growth is inhibited, resulting in a cleaner surface.

#### How Does Microban® Work?

Microban® antimicrobial technology works at a cellular level to continually disrupt the growth and reproduction of microorganisms. It operates a multi-modal attack, damaging the protein, cell membrane, DNA and internal systems of a microbe. Once built into a product, antimicrobial technology will start to work as soon as a microorganism comes into contact with the protected surface.

#### **Treatable Materials**

The powerful effects of Microban® antimicrobial product protection can be added to almost any material type.













### **Key Microban® Additives**

Microban® has a portfolio of more than 25 approved organic and inorganic antimicrobial technologies predominantly based on silver and zinc active ingredients.



**SilverShield®:** widely utilized silver-based antimicrobial. Effective against a broad-spectrum of bacteria.



**ZPTech®:** a zinc-based antimicrobial. Effective against bacteria, mold, mildew and algae.

### **Better Collaboration, Better Protection**

As a true innovation partner, Microban® works with you throughout the entire product development process to ensure our technologies enhance your products. We determine your goals and objectives and then develop multiple solutions in our world-class laboratories to identify the optimal antimicrobial formulation - one that is effective without compromising on your product's aesthetics. And we don't stop there; our turnkey approach includes sales training, marketing guidance, and technical support to assist in the successful launch of your antimicrobial product range.

# **The Benefits**

#### **EASY TO USE**

Easily integrated into existing manufacturing processes with no disruption.



#### **MUTIPLE APPLICATIONS**

Can be incorporated into a wide range of materials for use in a variety of applications, including those that come in contact with food.



#### **EFFECTIVE AGAINST MICROBES**

Inhibits the growth of microorganisms that can cause staining, bad odor, and premature product deterioration.



# **ADDS VALUE**

The Microban® brand is a trustmark recognized by consumers and business decision- makers alike.



# **REGULATORY REGISTRATIONS**

Registered with US Environmental Protection Agency (EPA) and EU Biocidal Products Regulation (BPR).



# PROVIDES A CLEANER BETWEEN CLEANINGS SOLUTION

Provides an added level of cleanliness protection in-between routine cleanings.



# **Discover More**

Microban® antimicrobial technology can be found in thousands of products made by hundreds of leading manufacturers around the world. If you're interested in learning how our solutions can become an integral part of your product, contact us today.

