## GTECHCLEAN Complete Germ Protection

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Bacteria, mold, mildew and fungi can be discovered in every environment and are part of normal everyday life. Even in the cleanest environments, many kinds of microbes will begin to multiply on surfaces and sometimes reach harmful levels. If these contaminated surfaces are touched by individuals or contact everyday products, the transfer of microbes begins, resulting in cross-contamination. Pathogenic bacteria, such as MRSA, STAPH and E.Coli can be spread via cross-contamination, which can lead to infection and illness in humans and animals.

Bacteria, mold, mildew and fungi can also build up on products, making them unclean, unhygienic, or discolored. Our bio-static antimicrobial additive applications provide *durable* surface protection, continuously working 24/7, to inhibit the growth of microbes which can cause sickness, stains, odors or declination of products.

## Clean & Green.

### **How GTech works**

The active ingredient of the GTech antimicrobial is an organo-functional silane technology. It physically disrupts or "disembowels" the target organism's cell membrane on contact. Our product molecularly bonds to a treated substrate, thus making the entire material itself antimicrobial. This means that the organism does not metabolize the active and become resistant. Through extensive studies, this colorless, odorless, and non-leaching technology was found to be safe and effective against a broad spectrum of virus, fungi, bacteria, algae, and yeast.

### **Bio-static antimicrobial surface protection**

GTech is a bio-static antimicrobial additive that can be impregnated into or applied to the product's surface, providing elemental antimicrobial protection. This protection will not wash off or wear away, giving it durable antimicrobial product surface protection for the useful life of the product.

### GTech antimicrobial is green

The GTech antimicrobial additive can be incorporated in a variety of materials, including powder coating, gel coats, latex paints, polymers, fabrics, paper products, and wood. GTech can also be applied to multiple areas such as: kitchen & bath, indoor/outdoor surfaces, plastic, stone and metal surfaces, automotive surfaces, footwear, pet odor areas, laundry, and carpet. The antimicrobial protection is non-leaching and environmentally friendly.

Our product molecularly bonds to a treated substrate, thus making the entire material itself antimicrobial.

This protection will not wash off or wear away, giving it permanent antimicrobial surface protection for the useful life of the product.

## Proven Technology.

#### **Effectiveness**

GTech Technology is based on a unique antimicrobial technology which effectively controls bacteria, fungi, algae and yeasts on a wide variety of treated articles and substrates. The base active is registered with the U.S. Environmental Protection Agency.

The antimicrobial has been used safely and effectively in all areas from construction to plastics as well as in hospital applications. The information on the following page has been prepared in response to numerous requests for a list of microorganisms against which the technology is effective. They were selected to provide a test spectrum which is representative of all significant types and varieties of microorganisms.

This data is provided solely to assist you in understanding the capabilities of the base technology and is not a warranty. Laboratory testing is performed in a controlled environment and may or may not be representative of real world conditions. Effectiveness against an organism should not be interpreted as eliminating, controlling, minimizing or otherwise affecting health conditions which may be associated with specific organisms.

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## Safe & Effective.

### Fungi

Aerobasidium pullulans Anabaena cylindrica B-1446-1C Cladosporium herbarum Fusarium nigrum Fusarium solani Gliocladium roseum Gonium sp. LB 9c **Oospora** lactis Oscillatoria borneti LB143 Penicillium citrinum Penicillium elegans Penicillium funiculosum Penicillium humicola Penicillium notatum Penicillium variabile Schenedesmus quadricauda Stachybotrys atra

### Algae

Chlorella vulgarus Pleurococcus sp. LB11 Saccharomyces cerevisiae Selenastrum gracile B-325 Volvox sp. LB 9

#### Viruses

Herpes simplex Poliovirus type 2

#### Bacteria

Acinetobacter calcoaceticus Aspergillus flavus Aspergillus fumigatus Aspergillus niger Aspergillus terreus Aspergillus versicolor **Bacillus** cereus Bacillus subtilis Brucella abortus Brucella cania Brucella suis Chaetomium globusum Citrobacter diversus Clostridium perfringens Corynebacterium bovis Enterobacter agglomerans Escherichia coli Escherichia coli ATCC 23266 Haemophilus influenzae Haemophilus suis Klebsiella pneumoniae ATCC 4352 Lactobacillus casei

Leuconostoc lactis Listeria monocytogenes Micrococcus sp. Mucor sp. Mycobacterium smegmatis Mycobacterium tuberculosis Penicillium albicans Penicillium chrysogenum Propionibacterium acnes Proteus mirabillis Proteus vulgaris Pseudomonas aeruginosa Pseudomonas aeruginosa PDR-10 Pseudomonas cepacia Pseudomonas fluorescens Rhizopus nigricans Salmonella choleraesuis Salmonella typhosa Staphulococcus aureus (non-pigmented) Staphylococcus aureus (pigmented) Staphylococcus epidermidis Streptococcus faecalis Streptococcus mutans Trichoderma flavus Tricophyton interdigitalie Tricophyton mentagrophytes Xanthomonas campestris

### Choose the best.

Making choices about which antimicrobial technology to use for your products is now easy. The words "bound," "embedded," and "contained" are much different than the word "chemically bound." Understanding the facts about modes of action, safety in handling, and durability before choosing your antimicrobial is important. With GTech Technology we are able to make the antimicrobial protection permanent or semi-permanent.

	GTech Silane-based	Silver-based	Triclosan-based
Mode of action	Physically ruptures cell membrane	Releases ionic free radicals that react with cell DNA and disrupt critical life processes in the cell.	Releases bischlorinated phenol (PCB) for consumption or cellular absorption, causing lethal mutations in the cell.
Durability	Permanent	Embedded in or on fiber binder or coating.	Embedded in or on fiber binder or coating.
Cost	Economical	Expensive	Moderate
Adaptive organisms	Does not promote adaptive organisms	Can create adaptive zones.	Can create adaptive zones.
In-plant safety/handling	Mild eye irritation	Harmful if inhaled, harmful if absorbed through skin, moderate eye irritation.	Moderate eye irritation, harmful if absorbed through skin, avoid contact with skin, eyes, or clothing. Do not breathe dust.

### Simply, the best.

GTech is the only chemical bound, non-leaching additive that provides unmatched safety and performance, at a competitive price. Our product tested at 0.25% by standardized test methods significantly out-performs competitive silver products at 1%. GTech has a p-factor that rivals all standards in any study. In short, GTech active ingredient is EPA registered, United States Department of Defense reveiwed, tested by independent laboratories, and is effective against a broad range of microbes.





### **To Learn More**

Contact us: 866-483-2400